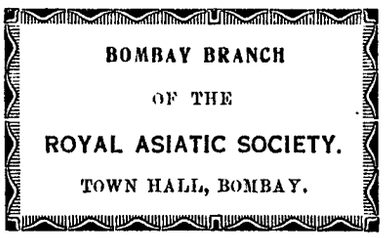
Report of the
Bombay Mission Press
for
1902, 1903, 1904

00133715


BOMBAY BRANCH
OF THE
ROYAL ASIATIC SOCIETY.
TOWN HALL, BOMBAY.

00133715

Digitized with financial assistance from
Government of Maharashtra
on 13 March, 2020

CONTENTS.

PAGE

MEMBERS AND COMMITTEE OF THE ASSOCIATION—

Rules and Regulations of the Association i
Rules for Primary Registration of Trade Marks vi
Rules for the Secondary Registration of Trade Marks already registered under the Old Rules viii
Rules applicable to all Trade Marks registered with the Association whether under the Old or the New Rules x
Rules for the Election of a Representative of the Association on the Board of the Victoria Technical Institute xi
Rules for the election of a Representative of the Association to serve on the Board of the Bombay Improvement Trust xii

REPORT OF THE COMMITTEE—

Ventilation of Factories ... ... 1—52
Alleged Short Reeling of Indian Yarns ... ... 11—60
Packing of Bales of Yarn for Eastern Ports ... ... 15—67
The Indian Cotton Duties and their effect on the Mill Industry 17
Reduction in the Rates of Freight on Cotton from Bombay to China and Japan... 18—70
Annual Revision of Tariff Values under the Cotton Duties Act 21
The Working of the Boiler Act 23
Keeping Fires in Boilers at Night ... ... 24—75
Industrial Water Rates in Bombay 26
Indian Limitation Act, 1877 ... ... 29—79
Customs Procedure in Calcutta in respect of Yarns shipped from Bombay ... 29
Chinese Import Duties on Yarns ... ... 29—83
New Chinese Import Tariff 86
Cotton Duties Act II of 1896 31
Eighteenth Indian National Congress 32
New Markets for Bombay Cotton Goods (East Africa ; Cyprus)... ... ... 32—116
Trade of China (Speech by Sir Ernest Satow) 96
Shuttle Guards ... ... 35—102
Infant Mortality 36
Progress of the Mill Industry 37
Shipments of Yarn 40
Silver and the China Exchanges since 1894 42
Sir Jamsetjee Jeejeebhoy Hospital 44
Victoria Jubilee Technical Institute 47
Revision of Rules of the Association 49
Trade Mark Register 50
Holidays for 1902 50
Stocks of Cotton in Bombay 50
Statistics ... ... 50—118
Balance Sheet 51
Proceedings of the Annual General Meeting 105
Statement of Cotton Spinning and Weaving Mills working and in course of erection in India on 30th June 1902 ... ...

BOMBAY MILLOWNERS' ASSOCIATION.

ESTABLISHED 1ST FEBRUARY, 1875.

List of Members.

AHMEDABAD DYEING AND MANUFACTURING COMPANY, LD.
AHMEDABAD SPINNING AND WEAVING COMPANY, LIMITED.
ALLIANCE COTTON MANUFACTURING COMPANY, LIMITED.
APOLLO PRESS ESTATE.
BARODA STATE SPINNING AND WEAVING MILLS.
BENGAL-NAGPORE COTTON MILLS, LIMITED.
BERAR MANUFACTURING COMPANY, LIMITED.
BOMBAY COTTON MANUFACTURING COMPANY, LIMITED.
BOMBAY COTTON PRESS COMPANY, LIMITED.
BOMBAY UNITED SPINNING AND WEAVING COMPANY, LD.
BRITANNIA MILLS, LIMITED.
CENTRAL INDIA SPINNING, WEAVING AND MANUFACTURING COMPANY, LIMITED.
CENTURY SPINNING AND MANUFACTURING COMPANY, LIMITED.
CHINA MILLS, LIMITED.
CITY OF BOMBAY MANUFACTURING COMPANY, LIMITED.
COLABA LAND AND MILL COMPANY, LIMITED.
CONNAUGHT MILLS COMPANY, LIMITED.
CORAL MILLS COMPANY, LIMITED.
CURRIMBHOY MILLS COMPANY, LIMITED.
DAMODHUR LUKHMIDAS MILLS COMPANY, LIMITED.
DAVID MILLS COMPANY, LIMITED.
E. D. SASSOON MILLS.
ELPHINSTONE MILL.
EMPRESS SPINNING AND WEAVING COMPANY, LIMITED.
FRAMJEE PETIT SPINNING AND MANUFACTURING COMPANY, LIMITED.
GEORGE GAHAGAN AND COMPANY.
GLOBE MANUFACTURING COMPANY, LIMITED.
GODAVERY VALLEY GINNING COMPANY, LIMITED.
GOKAK WATER POWER AND MANUFACTURING COMPANY, LIMITED.
HARVEY AND SABAPATHY COMPANY, LIMITED.
HINDOOSTAN SPINNING AND WEAVING MILLS COMPANY, LIMITED.
HINGUNGHAT MILL COMPANY, LIMITED.
HOWARD AND BULLOUGH MILLS COMPANY, LIMITED.
HYDERABAD (DECCAN) SPINNING AND WEAVING COMPANY, LIMITED.
IMPERIAL COTTON MILLS COMPANY, LIMITED.
INDIAN MANUFACTURING COMPANY, LIMITED.
INDO-CHINA MANUFACTURING COMPANY, LIMITED.
JAFUR ALEE SPINNING AND WEAVING COMPANY, LIMITED.
JULGAON MANUFACTURING COMPANY, LIMITED.
JULGAON COTTON GINNING COMPANY, LIMITED.
JAMES GREAVES MILLS COMPANY, LIMITED.
JAMSHED MANUFACTURING COMPANY, LIMITED.
JEWRAJ BALLOO SPINNING AND WEAVING COMPANY, LIMITED.
JUBILEE MANUFACTURING COMPANY, LIMITED.
KHANDEISH SPINNING AND WEAVING MILLS COMPANY, LIMITED.
KHATAO MUKANJEE SPINNING AND WEAVING COMPANY, LIMITED.
KOHINOOR MILLS COMPANY, LIMITED.
LAKHMIDAS KHIMJEE SPINNING AND WEAVING COMPANY, LIMITED.
LAXMI COTTON MILLS COMPANY, LIMITED.
LEOPOLD SPINNING, BLEACHING AND MANUFACTURING COMPANY, LIMITED.
LORD REAY MANUFACTURING COMPANY, LIMITED.
MADHAVJEE DHARAMSEY MANUFACTURING COMPANY, LD.
MADRAS UNITED S. AND W. MILLS COMPANY, LIMITED.
MADURA MILLS, LIMITED.
MANOCKJEE PETIT MANUFACTURING COMPANY, LIMITED.
MOON MILLS, LIMITED.
MORARJEE GOCULDAS SPINNING AND WEAVING COMPANY, LIMITED.
MUIR MILLS COMPANY, LIMITED.
NARANJEE MILLS COMPANY, LIMITED.
NEW EMPRESS SPINNING AND WEAVING COMPANY, LIMITED.
NEW GREAT EASTERN SPINNING AND WEAVING COMPANY, LIMITED.
NEW PACHORA MANUFACTURING COMPANY, LIMITED.
NICOL MILLS.
OOMRI GINNING AND PRESSING COMPANY, LIMITED.
PRESIDENCY MILLS COMPANY, LIMITED.
PARBHANI GINNING COMPANY, LIMITED.
QUEEN SPINNING AND WEAVING COMPANY, LIMITED.
RAI SAHEB REKCHAND MAHTA'S SPINNING AND WEAVING MILL.
RIPON MANUFACTURING COMPANY, LIMITED.
SARASWATI MILLS COMPANY, LIMITED.
SASSOON SPINNING AND WEAVING COMPANY, LIMITED.
SHOLAPORE SPINNING AND WEAVING COMPANY, LIMITED.
SHRI GANGAJI MILLS COMPANY, LIMITED.
SOONDERDAS SPINNING AND WEAVING MILLS COMPANY, LIMITED.
SOUTHERN MARATHA S. AND W. COMPANY, LIMITED.
STANDARD MILLS COMPANY, LIMITED.
SURAT PRESS FACTORY.
SVADESHI MILLS COMPANY, LIMITED.
SWAN MILLS.
TEXTILE MANUFACTURING COMPANY, LIMITED.
UNION MILLS, LIMITED.
VEERAMGAM SPINNING, WEAVING AND MANUFACTURING COMPANY, LIMITED.
VICTORIA MILLS.
WALLACE FLOUR MILLS COMPANY.
WESTERN INDIA SPINNING AND MANUFACTURING COMPANY, LIMITED.

COMMITTEE FOR 1903.

BOMONJEE DINSHAW PETIT, ESQ., *Chairman.*
SASSOON J. DAVID, ESQ., *Deputy Chairman.*
S. A. NATHAN, ESQ.
AHMEDBHAI HUBIBBHOY, ESQ.
DINSHAW E. WACHA, ESQ.
W. H. BRADY, ESQ.
GORDHANDAS KHATAW, ESQ.
D. J. TATA, ESQ.
MANMOHANDAS RAMJEE, ESQ.
SIR DINSHAW PETIT, BART.
D. C. SHROFF, ESQ.
THE HON'BLE MR. VITHULDAS DAMODHUR THACKERSEY.
JAMSHEDJI ARDASEER WADIA, ESQ.
SIR J. COWASJEE JEHANGHIR.
GOCULDAS NARANJEE, ESQ.
N. N. WADIA, ESQ.
H. E. E. PROCTER, ESQ.
HERBERT R. GREAVES, ESQ.
FAZULBHOY CURRIMBHOY EBRAHIM, ESQ.

FREDERICK NOEL-PATON, ESQ., *Secretary.*

RULES AND REGULATIONS.

I.—The Association shall be called the Bombay Millowners' Association.

II.—The objects of the Association are—

(*a*) The protection of the interests of Millowners and users of steam, water $\frac{\text{and}}{\text{or}}$ electric power in India.

(*b*) The promotion of good relations between the persons and bodies using such power.

(*c*) The doing of all those acts and things by which these objects may be furthered.

III.—Any individual, partnership or Company owning one or more mill or mills or one or more factory or factories actuated by steam, water $\frac{\text{and}}{\text{or}}$ electric power shall be admissible to membership on $\frac{\text{his}}{\text{their}}$ paying in advance the annual subscription and on $\frac{\text{his}}{\text{their}}$ signing in the form prescribed in Section V an undertaking to conform to the Rules of the Association.

IV.—The subscriptions to be paid by any individual, partnership or Company on entering the Association shall be as follows :—

(*a*) Rupees 5 per annum for every 1,000 spindles $\frac{\text{and}}{\text{or}}$ Rs. 5 per every 100 looms set up in the mill or mills, factory or factories that at the time of subscription belong to the said individual, partnership or Company.

(*b*) Rupees 5 per annum for every Rs. 50,000 of the estimated value of machinery, buildings, $\frac{\text{and}}{\text{or}}$ land shown on the audited balance sheet of such factory or factories, not being Spinning and Weaving Mills, as may, at the time of subscription, belong to the said individual, partnership or Company.

Provided that the minimum subscriptions payable by any one member shall be Rs. 50 per annum.

V.—The form of adherence to the rules of the Association, to be signed by members as provided in Rule III, shall be as follows :—

In consideration of the protection afforded by the members of the Bombay Millowners' Association to the Trade-Mark and Tickets used by $\frac{me}{us}$ *and in consideration of the general maintenance by the Association of the interest of the industry in which* $\frac{I\ am}{we\ are}$ *engaged* $\frac{I}{we}$, ... , *engaged in* . . . . . *in the town of* . . . . . *having carefully read and fully understood all the rules of the said Association, and the Rules relating to Registration of Trade-Marks, do hereby declare and agree that* $\frac{I}{we}$ *will during* $\frac{my}{our}$ *membership of the said Association in all things conform faithfully and absolutely to all the said rules and to such other rules as the Association shall institute by resolution duly passed in accordance with the relevant provisions herein that* $\frac{I}{we}$ *will register with the Association all the trade-marks applied by* $\frac{me}{us}$ *to any the produce of the mill or mills, factory or factories, owned by* $\frac{me}{us}$ *that all trade-marks so applied by* $\frac{me}{us}$ *whether they be registered with the Association or not, shall be subject to the rules of the Association, that* $\frac{I}{we}$ *will submit to arbitration any dispute or disputes in which* $\frac{I}{we}$ *may be concerned with another member or members of the Association in respect of a Trade-Mark or Trade-Marks and that* $\frac{I}{we}$ *will in all things endeavour to further the objects of the Association.*

VI.—Membership of the Association shall terminate on the expiry of three months' notice given to the Secretary in writing by a member of the Association of his intention to resign membership. Any member may, for any act done, or conduct pursued by such member, in contravention of the Rules of the Association or to its detriment or discredit, or injurious to its welfare and interests, be expelled from the Association by a majority of three-fourths of the members present at a general meeting specially convened by the Committee of the Association, to consider the act or conduct in question, and a resolution passed by such majority that the act or conduct in question was in contravention of the Rules of the Association, or was detrimental or discreditable thereto or injurious to its welfare and interests, and that the member responsible for such act or conduct is expelled in consequence of the same, shall be in every respect conclusive. *Provided always* that, at some time before the passing of such resolution, the member responsible for the act or conduct complained of shall be afforded a full opportunity of being heard in defence or explanation in regard thereto.

VII.—Every individual, partnership or Company being a member of the Association shall have the right to give by its representative one vote on any motion put to a general meeting of the Association.

VIII.—The person or persons empowered to act and vote on behalf of an individual or partnership as a member of the Association shall be either a partner or a person signing *per procuration* for the said individual or partner. The person or persons empowered to act and vote on behalf of a public Company as a member shall be either one or more of the Board of Directors or the Agent, Secretary or Manager of the Company or that individual or a member of that firm which shall act as Secretary, Treasurer or Agent, or a person authorised by that individual or firm to sign *per procuration.*

IX.—The name or names of the person or persons empowered to vote on behalf of an individual, partnership or Company as a member of the Association shall be registered with the Association in order of precedence, and no person not so registered shall have power to so act or vote.

X.—If two or more individuals representing the same partnership or public Company be present at any meeting, only that one of the said individuals who takes priority in the order of precedence registered by the said partnership or Company with the Association shall vote. Provided always that the votes of a plurality of members represented by a single individual or partnership may be recorded either by one or more persons having the aforesaid qualifications to vote and being registered with the Association to that effect.

XI.—One-fourth of the members of the Association shall be a sufficient quorum to form any general meeting other than the annual general meeting provided for under Rule XXIII, when due notice of the intention to hold such meeting has been given in manner hereinafter set forth; but if within thirty minutes after the time appointed for the meeting such quorum be not present, the meeting shall be adjourned to such time on the following day or other day as the members present may determine. Previous notice of such adjourned meeting to be given in one or more of the English and one or more of the Vernacular newspapers published in Bombay. If at such adjourned meeting the quorum be not present, those members who are present shall be the quorum and may transact the business for which the meeting was called.

XII.—The affairs and funds of the Association shall be managed by a Committee of twenty members, consisting of a Chairman, a Vice-Chairman and eighteen members, of whom seven members shall retire by rotation in each *year*, but be eligible for re-election. The appointment or re-appointment of members to fill these seven vacancies shall be made at the Annual General Meeting of the Association.

XIII.—The Chairman of the Committee shall, if present, preside at all meetings of the Association or of the Committee held during his term of office. In the absence of the Chairman the Vice-Chairman shall preside, and failing both of these the Chair shall be taken by one of the members of the Committee to be appointed by the other members of the Committee present on the occasion.

XIV.—The names of the members whom it is proposed to appoint as Chairman and Vice-Chairman of the Committee for the ensuing year, as also the names of the seven members of Committee who retire but are eligible for re-election, shall be circulated amongst the members at least seven days before the annual General Meeting, and no two members of any one *firm* or *Company* shall be eligible to serve on the Committee at the same time. Provided always that the fact of a member's holding a share or shares in a Company represented by another member of Committee shall not prejudice any right he may possess under Rule VIII to vote on behalf of another firm or Company.

XV.—In case of a tie in voting either in Committee or in General Meeting the Chairman for the time being shall have a casting vote.

XVI.—In the event of the death or resignation of the Chairman or Vice-Chairman or of any member of the Committee, a fresh appointment shall be made by the Committee.

XVII.—Five members of the Committee present in person shall form a sufficient quorum at any meeting of the Committee.

XVIII.—The Committee shall meet at least once in every month, and oftener if need be.

XIX.—A Secretary shall be appointed by the members and his remuneration shall be fixed by the Committee. His duties shall be to keep the records and accounts of the Association, to collect subscription, paying the same into the Bank of Bombay or such other bank as may be approved by the Committee in this behalf, to the credit of the Association's account, to consider all proposed legislative measures or any other matter that may affect the interest of the Association and generally to act in the Association's interest under the orders of the Committee.

XX.—Minutes of all proceedings of the Association in Committee or in General Meeting shall be made and entered regularly in a minute book to be kept by the Secretary. This book shall be open to the inspection of any members at any reasonable time.

XXI.—The Committee for the time being shall have the control of the funds of the Association, and pay all necessary expenses and generally manage its affairs. They may disburse money from the Association's funds either by way of loan or gift for the purpose of furthering any of the objects for the carrying out of which the Association is formed. They may advance money either by way of loan or gift to any member of the Association to assist him in conducting or defending a law suit or carrying on an arbitration if in their opinion the principles involved in the said suit or arbitration affect the interests of the members as a body, and they may do all other things calculated to promote the general objects of the Association. Provided always that no one sum exceeding Rs. 2,000 shall be advanced by way of loan or gift by the Committee without the sanction of a majority of the members present at a general meeting to be called to sanction such gift or loan, and that, if at any time during any year the disbursements of the Committee, after providing for ordinary expenditure, such

as Secretary's salary, printing, stationery, &c., amount to seven-eighths of the funds remaining in hand, then the Committee shall call a general meeting and lay the accounts before the members of the Association. For every annual general meeting the Committee shall prepare a statement of the accounts of the Association which shall be circulated amongst the members seven days prior to the date of the meeting.

XXII.—The Committee may, from time to time, appoint a Sub-Committee or Sub-Committees to investigate and to report upon particular matters, and may invite any member of the Association not being a member of the Committee to act on such a Sub-Committee if for any special reason such a course may seem to them advisable. But a Sub-Committee shall have no executive or substantive power nor shall its recommendations be of any effect unless and until such recommendations are ratified by the Committee.

XXIII.—The Annual General Meeting of the Association shall be held at such time as the Committee may appoint, and the Committee may at any time call a general meeting should it seem to them expedient to do so. Seven days' notice of any annual general meeting and of any other general meeting, other than a general meeting adjourned under the circumstances contemplated by Rule XI, shall be given by an advertisement in one or more of the English and one or more of the Vernacular newspapers published in Bombay. Any four members may by a requisition addressed to the Committee and accompanied by a statement of reasons request them to call a general meeting of members, and the Committee on receipt of such a requisition shall call a meeting to be held on the earliest convenient day.

XXIV.—All the moneys or funds of the Association shall be paid into an account to be opened with the Bank of Bombay or such other Bank as may be approved by the Committee in this behalf in the name of the Association. All cheques on that account shall be signed by the Chairman, or in his absence by the Acting Chairman and one member of the Committee.

XXV.—Solicitors to the Association shall be appointed by the Committee who may advise with them when necessary.

XXVI.—Neither the Chairman, Vice-Chairman, nor any member of Committee nor the Secretary shall be answerable for anything other than his own acts or defaults, nor shall he be answerable for any act done by him for the sake of conformity only, or for any moneys of the Association other than such as shall come into his own hands, or for any collector or receiver of moneys appointed by the Committee, or for any misfortune, loss or damage happening to the Association by reason of any deed done or executed by him as a Chairman, Vice-Chairman or member of the Committee, or by reason of any error in judgment or mere indiscretion on his part in the performance of his duties, or otherwise on any account, except for wilful negligence or fraud. Every person being Chairman, Vice-Chairman, or a member of the Committee, his heirs, executors, or administrators, shall at all times be indemnified and saved harmless out of the funds of the Association from and against all costs, losses, damages and expenses whatsoever incurred or sustained by him in the execution of his powers or duties, and every person having been or being a Chairman, Vice-Chairman, or member of Committee, or Secretary of the Association, his heirs, executors, and administrators, shall be indemnified and saved harmless, out of the funds of the Association, against all actions, suits, claims, and demands whatsoever, brought or made against him or them in respect of any engagement of the Association, save such as may be incurred by his own personal wilful neglect or default.

XXVII.—An annual report of the proceedings of the Association shall be prepared and printed for circulation amongst the members, and copies of this report may be sent to any similar Association or individuals or Corporations whom it may be likely to interest.

XXVIII.—These Rules shall come into force on the 1st day of January 1904. Up to that date the present Rules shall be in force. The foregoing Rules and copies of the form of undertaking prescribed under Rule V shall forthwith be printed and distributed to all members, and on and after the 1st day of October 1903 no member who has not duly signed and deposited with the Secretary the said form of undertaking shall be entitled to the privileges of membership. No alteration in these rules shall be made save and except by a majority of three-fourths of the members of the Association present at a general meeting duly convened for the purpose of considering such alteration, the terms of which shall be fully set forth in the notice convening the said general meeting.

RULES FOR PRIMARY REGISTRATION OF TRADE-MARKS.

Definition.—Throughout all the Rules of the Association—

The word "trade-mark" shall be understood to include the word "ticket."

All grey and/or bleached cotton yarns or threads shall be regarded as belonging to one and the same "class of goods."

All cotton yarns or threads, coloured in whole or in part, shall be regarded as belonging to a distinct "class of goods."

All cotton cloths shall be regarded as belonging to a third distinct "class of goods."

1. Every member shall at the earliest convenient date, after the 1st of May 1903, send to the Secretary with an application for registration a copy of every trade-mark applied $\frac{\text{and}}{\text{or}}$ intended to be applied by such member to any the produce of the mill or mills, factory or factories, owned by such member, together with *that number of* spare copies of each trade-mark which the Committee may from time to time prescribe in this behalf, regard being had to the total number of the membership, and shall attach to each such copy a writing showing the class or classes of goods to which the applicant desires to apply the trade-mark in question.

2. The Secretary shall send to every member one such spare copy of every trade-mark submitted for primary registration, and shall intimate that the trade-mark in question will in one month's time be registered for use on the class or classes of goods specified unless some member shall, in the interval, formally object to such registration on the ground that the trade-mark submitted is a colourable imitation of a trade-mark already registered by the objector with the Association for use on one or more the class or classes of goods specified and by such objector habitually applied to such class or classes of goods. After *three weeks' delay a reminder* shall be sent by the Secretary to such members as have not replied in the interval. At the end of *one month* from the original distribution of copies the trade-mark in question shall be registered for use on all such specified class or classes of goods in respect of which no objection has been raised by a writing duly delivered to the Secretary.

3. Prior registration with the Association under these new Rules of a trade-mark for use on a class or classes of goods specified to that effect at time of registration shall *primâ facie* be held to secure to the member by whom such trade-mark has been so registered an exclusive right as against all other members of the Association to use the said trade-mark on the class or classes of goods so specified.

4. Any dispute arising out of an objection raised to the registration of a trade-mark, on the grounds stated in Rule 2, shall be referred to the *arbitration* of two disinterested parties one to be chosen by each party to the dispute.

5. If the arbitrators disagree upon any issue or issues submitted to them, they shall refer the matter to an umpire to be agreed upon between them with the consent of their principals and whose decision shall be final.

6. In any of the following cases :—

(*a*) if all the parties do not, after difference has arisen, proceed to the appointment of an arbitrator or arbitrators ;

(*b*) if an appointed arbitrator refuses to act or is incapable of acting or dies, and the party or parties do not supply the vacancy ;

(*c*) if the two arbitrators having disagreed fail to appoint within fourteen days a third arbitrator or umpire;

(*d*) if an appointed umpire or third arbitrator refuses to act or is incapable of acting or dies and the parties or their arbitrators do not supply the vacancy;

any party may serve the other party or parties with a notice, at the same time appointing an arbitrator, umpire or third arbitrator to supply the vacancy.

7. If such appointment be not agreed to $\frac{\text{and}}{\text{or}}$ the arbitration be not proceeded with within fourteen days after the service of the notice, the Committee may, on application by either party, appoint an umpire or a Special Committee of Arbitration which shall consist of three members and which shall have the like power to act in the reference and to make an award as if they had been appointed by consent of all parties and the award of such umpire or Special Committee of Arbitration shall be final.

8. If both arbitrators or the umpire or Committee of Arbitration decide that the trade-mark submitted for registration is a colourable imitation in the sense alleged of one already registered with the Association for application to the class or classes of goods to which the trade-mark submitted is designed to be applied, registration shall not be made and the member who has submitted it for registration shall forthwith desist from using the said trade-mark on such class or classes of goods.

9. If both arbitrators or the umpire or Committee of Arbitration decide that the trade-mark submitted is not a colourable imitation in the sense alleged, registration shall be made.

10. A member who has objected to the registration of a trade-mark for use by another member or any specified class or classes of goods, and whose objection has been disallowed by both arbitrators or by an umpire or by a Committee of Arbitration, shall offer no further opposition to the use of the said trade-mark by the member in whose name it is registered so far as concerns the class or classes of goods for which it is so registered. But such abstention shall in no way prejudice or affect the right of a member whose objection has been disallowed to object to the registration of the same trade-mark for use on other class or classes of goods or to the registration of another ticket.

11. When the arbitrators or umpire have made an award, they or he shall sign it and forward it to the Committee of the Association; and all such awards shall be recorded by the Association and given effect to in the Association's Register.

12. The Committee may remit any award to the re-consideration of an umpire and may appoint any reasonable time within which a fresh award must be made, failing which they may proceed on application by either party to appoint an umpire or a Committee of Arbitration as under Rule 6 hereof. From the time of the making of such an appointment the right of the original arbitrators or umpire to make a fresh award shall terminate and any award he or they may thereafter make in the matter shall be void.

13. When an arbitrator or umpire has misconducted himself, the Committee may remove him or may quash the award in the making of which he was concerned and order or conduct a fresh arbitration.

14. The following fees shall be chargeable to members :—

(*a*) In cases where an umpire is appointed by the Committee under Rule 7 or 12, Rs. 15 only, of which Rs. 10 shall be paid by the Association to the said umpire. Such fee to be paid by the losing party.

(*b*) In cases where a Committee of Arbitration are appointed by the Committee, Rs. 35 only, of which Rs. 10 shall be paid to each member of the Committee of Arbitration. Such fee to be paid by the party applying for appointment of a Committee of Arbitration instead of an umpire.

RULES FOR THE SECONDARY REGISTRATION OF TRADE-MARKS ALREADY REGISTERED UNDER THE OLD RULES.

A.—All members are requested to send in to the Secretary a complete set of the trade-marks registered by them under the old Rules. Ten copies of each trade-mark should be forwarded, and such copies may be marked "FOR SECONDARY REGISTRATION PURPOSES ONLY."

B.—Each trade-mark registered under the old Rules should be accompanied by a statement showing—

(*a*) The class or classes of goods, if any, to which, at time of primary registration, it was specifically declared that the ticket was to be applied.

(*b*) The class or classes of goods, if any, to which the applicability of the trade-mark was clearly indicated by words, letters $\frac{\text{and}}{\text{or}}$ figures forming a part of, or an adjunct to, the design.

(*c*) The class or classes of goods, if any, to which the trade-mark has, in fact, been habitually applied by the applicant for registration.

(*d*) The class or classes of goods to which the applicant desires to apply the trade-mark.

C.—The said trade-marks shall be compared by the Secretary with those on the existing register; and a Sub-Committee of two members shall be appointed to advise the Secretary. The said Sub-Committee may require from any member applying for registration of a trade-mark all necessary information and sufficient proof regarding any question of fact as to the class or classes of goods to which any trade-mark has been habitually applied.

D.—Registration of a trade-mark, under the old Rules of the Association, shall constitute Registration under these present Rules. But the right established by such registration, under the old Rules, shall, under the new Rules, be defined and limited by the following considerations:—

(*a*) If at the time of registering a trade-mark under the old Rules, the member registering it has specifically declared the class or classes of goods to which the said trade-mark was to be applied, the said member shall be entitled by virtue of such registration to use the said trade-mark only for application to the class or classes of goods so specifically declared, $\frac{\text{and}}{\text{or}}$ to which he has habitually applied it, and shall not by virtue of such registration have any right to use the said trade-mark on any other class or classes of goods or be entitled to oppose the registration of a similar trade-mark by another member for application to another class or classes of goods.

(*b*) If a trade-mark registered by a member under the old Rules bear, as part or as an adjunct to the design, words, letters $\frac{\text{and}}{\text{or}}$ figures clearly indicating the class or classes of goods to which the said trade-mark was to be applied, the said member shall be entitled by virtue of such registration to use the said trade-mark only for application to the class or classes of goods so indicated, $\frac{\text{and}}{\text{or}}$ to which he has habitually applied it, and shall not by virtue of such registration have any right to use the said trade-mark for any other class or classes of goods or be entitled to oppose the registration of a similar trade-mark by another member for application to any other class or classes of goods.

(*c*) If a trade-mark registered under the old Rules do not bear, as part of, or as an adjunct to, the design, words, letters $\frac{\text{and}}{\text{or}}$ figures clearly indicating the class or classes of goods to which it was to be applied, and if such registration of such a trade-mark have not been accompanied by a specific declaration of the class or classes of goods to which it was to be applied, the member who so registered such a trade-mark shall be entitled by virtue of such registration to register the said trade-mark under the new Rules for use only on such the class or classes of goods to which he can show that he has, in fact, habitually applied it, and shall not have any right by virtue of such registration under the old Rules to oppose the registration of a similar trade-mark by another member for use on any other class or classes of goods.

(*d*) Provided that any member whose right of user in a trade-mark by virtue of registration under the old Rules is limited as above to application to a certain class or classes of goods, may submit the said trade-mark to be registered for use on any other class or classes of goods, and such submission for registration shall be dealt with in accordance with the new Rules for primary registrations.

RULES APPLICABLE TO ALL TRADE-MARKS REGISTERED WITH THE ASSOCIATION, WHETHER UNDER THE OLD OR THE NEW RULES.

(A)—All questions of fact as to the class or classes of goods to which a trade-mark has been habitually applied shall be decided by arbitration in accordance with the procedure laid down in that behalf in the new Rules for first registrations.

(B)—If two or more members shall have registered with the Association trade-marks which are found in practice to resemble each other so far as to cause inconvenience, such members may jointly refer the matter to arbitration for a decision as to their respective claims to the exclusive right of user, each party appointing his own arbitrator. Should such arbitrators not agree, the matter may, on joint application of both or all the disputants, be referred by the Committee of the Association to a Sub-Committee to be specially appointed for the purpose of the single arbitration. Such application must be accompanied (*a*) by a clear statement of the issues to be decided ; (*b*) a written undertaking by all the parties jointly or severally to abide by the award to be given ; (*c*) a fee of Rs. 20 from each party. On receipt of such application and accompaniments the Committee shall appoint a Special Sub-Committee of three members in accordance with No. 6 of the new Rules for first registrations, whose award shall be final. Such awards shall be recorded by the Association and given effect to in the Association's Register.

(Γ)—In arbitrations, as to exclusive or prior right of user in any trade-mark for any or all class or classes of goods, the following considerations shall be considered decisive in the degrees indicated by the number of points hereunder assigned to each :—

(*a*) Specific DECLARATION at time of registration of the class or classes of goods to which the trade-mark was to be applied... 5 POINTS.

(*b*) Clear INDICATION by words, letters or figures on the trade-mark of the class or classes of goods to which it was to be applied ... ... 3 POINTS.

(*c*) PRIORITY of registration without either declaration or indication of the class or classes of goods to which the trade-mark was to be applied ... ... 2 POINTS.

Provided always that if the member who has registered a trade-mark $\frac{\text{and}}{\text{or}}$ who can prove declaration $\frac{\text{and}}{\text{or}}$ indication of the class or classes of goods to which it was to be applied, can prove also that he has, in fact, habitually applied the said trade-mark to any or all of the said class or classes of goods, the points above assigned to such declaration or to such indication as the case may be shall be squared in so far as relates to the class or classes of goods to which the trade-mark has, in fact, been habitually applied.

Example: Thus a member who first registered a trade-mark, whose trade-mark fulfilled the conditions of indication as above defined, who further, at the time of registration, specifically declared the class or classes of goods to which it was to be applied, and who proves that he has, in fact, habitually applied the said trade-mark to the said class or classes of goods or to any of them would be entitled to the following points in respect of each and all of the said condition so far as relates to the class or classes of goods to which the trade-mark has, in fact, been habitually applied.

(*a*) DECLARATION,	5	POINTS	squared	in	consideration	of	use	25 POINTS.
(*b*) INDICATION,	3	,,	,,	,,	,,	,,		9 ,,
(*c*) PRIORITY,	2	,,	,,	,,	,,	,,		4 ,,
							Total ...	38 POINTS.

(Δ)—If there shall be on the Association's Register two trade-marks, either of which might reasonably be held to be a colourable imitation of the other, but registration of which was in each case accompanied by specific declaration of the class or classes of goods to which it was to be applied, or both of which trade-marks bear words, letters or figures clearly indicating applicability to any or all the same class or classes of goods, or either of which trade-marks bears words, letters or figures clearly indicating its applicability to any or all the class or classes of goods for which the other trade-mark was specifically declared at time of registration or to which such other trade-mark has, in fact, been habitually applied, the fact of their so standing on the register shall be held to show that neither trade-mark was at time of primary registration considered to be a colourable imitation of the other. And if the owner of one of the said trade-marks shall, on the ground of colourable imitation, oppose an application for the registration of the other of the said trade-marks for use on any or all the class or classes of goods not declared or indicated at time of original registration, such opposition shall be disallowed, unless both parties agree under Rule *F* to refer the matter to arbitration.

RULES FOR THE ELECTION OF A REPRESENTATIVE OF THE ASSOCIATION ON THE BOARD OF THE VICTORIA TECHNICAL INSTITUTE.

1. Any member of the Association shall be eligible as Representative of the Association on the Board of the Victoria Jubilee Technical Institute.

2. The period of office of any elected Representative of the Association on the Board of the said Institute shall be one of three years. At the end of such period he shall retire but may be re-elected.

3. The appointment of the Association's Representative shall be made at a General Meeting of the Association and such Representative shall *ex-officio* be a member of the Committee of the Association.

4. In the event of the disqualification of the Association's Representative under Section 9 or 10 of the Rules and Regulations of the said Institute, or in the event of the decease or resignation of such Representative, or in event of his ceasing for any reason to be a member of the Association, the Committee shall appoint a successor, who shall hold office up to that date at which the Representative whom he succeeds would, under Rule 2, have retired.

5. In the event of the absence of the Association's Representative from three or more consecutive meetings of the Board, or in the event of the Association's Representative applying for leave of absence, the Committee may, if they think fit and with the consent of the Board of the said Institute, appoint a substitute, who shall hold office until the Representative whom he replaces resumes attendance or up to that date at which the Representative whom he replaces would, under Rule 2, have retired.

RULES FOR THE ELECTION OF A REPRESENTATIVE OF THE BOMBAY MILLOWNERS' ASSOCIATION TO SERVE ON THE BOARD OF TRUSTEES UNDER THE PROVISIONS OF THE CITY OF BOMBAY IMPROVEMENT ACT, 1898.

(Adopted at the General Meeting of members held on 22nd September, 1898.)

1. Candidates shall be nominated in writing signed by one proposer and one seconder, who must be both members of the Association, and the nomination papers must be sent in to the Secretary ten clear days before the day fixed for the election.

2. The Secretary of the Association shall circulate the names of the applicants four clear days before the election.

3. The Committee shall appoint two days, which shall be duly advertised, upon which the balloting shall take place. The ballot-box shall be open from 10 a.m. till 6 p.m. on each day.

4. Votes may be given either in person or through any one duly authorised by a member of the Association, each subscribing member being entitled to one vote only.

5. The Committee shall appoint two scrutineers who, at 6 p.m. on the second day of the ballot, shall open the box and declare the result.

6. The candidate who has the largest number of votes shall be declared duly elected.

7. In the event of an equality of votes preventing the due election of any of the candidates, the members of the Association shall vote afresh in the manner above laid down, the voting in such case to be confined to the candidates who have secured an equal number of votes.

8. In the event of a casual vacancy the above course shall be followed in the appointment of a substitute.

9. In the event of the temporary absence of a representative of the Association on the Board of Trustees necessitating the appointment of a substitute under Section 13 (2), such appointment shall be made by a majority of the votes of the Committee of the Association at a meeting called for the purpose.

REPORT

OF THE COMMITTEE OF THE

BOMBAY MILLOWNERS' ASSOCIATION.

For the period from 1st January to 31st December 1902.

VENTILATION OF FACTORIES.

See Reports of Association, 1892, page 16; 1893, page 66; 1895, page 133; 1896, page 112; 1897, page 9.

Reference to the Reports quoted above will show that for some years an intermittent controversy has proceeded between the Millowners on the one hand and Government on the other regarding certain of the Rules issued under the Indian Factories Act in 1892. The chief cause of trouble has been Rule 5, governing the ventilation of factories. It reads as follows :—

"5. Every factory shall be ventilated to the satisfaction of the Inspector. . . . .
"No factory shall be considered ventilated unless ventilating openings are provided in the proportion
"of ten square feet for each person employed in any room and the openings are such as to admit
"of a continued supply of fresh air : Provided that it shall be in the discretion of the Inspector to
"waive the rule as to the measurement of the ventilating openings, when he is satisfied that the
"ventilation is good and the enforcement of the exact measurement of ten feet for each person
"would be an unnecessary hardship. The reasons for waiving the Rule shall, however, be
"recorded in writing."

How this astonishing Rule ever came into existence will now probably never be known, except that it was borrowed from those in force in the Central Provinces.* It has even been suggested that some Babu or printer has misread 10″ (ten inches) for 10′ (ten feet). Its inherent impracticability was early recognised by this Association, and latterly was admitted by Government. But the extent of its absurdity was never clearly shown till the matter was re-opened by the Collector of Customs in the course of the past year ; and as the whole history of the question must be studied in the light of that absurdity, it is well to state it in preface to the rest.

According to Rule 5, each hand in a Mill is to be provided with 10 square feet—not 10 feet square—of aperture to the outer air. It is a well-known point in public health that the velocity of air admitted into a building for ventilation purposes must not exceed $2\frac{1}{2}$ feet per second. Specific reference to this standard will be found in the letter of Colonel Waters to the Collector, dated 4th July 1894

* *See* a valuable memorandum of Mr. Jackson, dated 23rd April 1894.

printed at page 136 of the Annual Report of this Association for the year 1895. The third factor required for proof of the Rule's absurdity is a standard of the volume of fresh air required by a mill-hand. This is found in the Cotton Cloth Factories Act,* 1889, which lays down that each hand must receive 600 cubic feet of fresh air in the hour. It should be premised that this Act was especially stringent, because it related to factories in which the air is artificially humidified. It would, therefore, not be reasonable to apply the standard to all parts of a Bombay Cotton Mill, but for purposes of demonstration it may for the moment be accepted. Now, since there are 3,600 seconds in an hour, an aperture of one square foot will obviously admit air to the extent of 3,600 cubic feet per hour if the velocity be one foot per second. This, according to the Cotton Cloth Factories Act, would be enough for six hands. Therefore, an aperture of ten square feet, with the same low air-velocity, will admit enough air for sixty hands; while, if the air enter at the healthy limit of 2½ feet per second already alluded to, that aperture will admit enough air for no less than ONE HUNDRED AND FIFTY HANDS. This Rule has been in existence for years. It embodies the only guidance that Government has afforded to Millowners for the construction or regulation of their factories; and it is not surprising that any proposal at this stage to compel owners at great cost to remedy structural defects that would never have come into existence if Government had made some reasonable enactment on the subject, should be resented. The Rule is so entirely out of relation to what is necessary or even possible that it is virtually non-existent. As a matter of fact, it has never been enforced; and the probability of any Court's upholding any steps taken with regard to it is believed to be most remote.

Misleading articles have recently appeared in the Bombay press upon the subject of the ventilation of factories in Bombay. In those articles it was stated that the Indian law laid down no standard for such ventilation, and it will be seen from paragraph 3 of the letter from the Collector, dated 3rd November 1902, that misapprehension exists in certain quarters as to the exact meaning of the Rule. The paragraph in question says "that the Rule in dispute, even if the "provision of a ten-foot square (*sic*) lateral opening were eliminated as impracti-"cable, would leave it for the Inspector of Factories to decide in each case if any "part of a factory were or were not adequately ventilated, and this, I think, is "the ultimate point to which we must always come if other measures fail."

Reference to the text of the Rule will show that, as a matter of fact, the Inspector has, under it, no power "to waive the rule as to the measurement of the "ventilating openings" unless "he is satisfied that the ventilation is good." When he is not so satisfied, he has no alternative but to insist on the maintenance of the standard of ten square feet.

He is not permitted either to sanction or to prescribe any other method of ventilation. This was fully recognised during the earlier phases of the controversy, as will be seen on reference to (*a*) the last passage of the 7th paragraph of the letter of the Chief Inspector of Factories to the Collector of Customs, dated 27th July 1894; (*b*) the last sentence in the first paragraph of the Collector's letter to the Association, dated 16th May 1895. In the earlier part of this letter the

* Now repealed.

Collector says :—" The Rule prescribes 'that every factory shall be ventilated to " the satisfaction of the Inspector,' " but further on he explains that " the Inspector's " decision that the ventilation of the Mills is unsatisfactory would *leave no option* in " the matter of enforcing the scale prescribed by law. The Chief Inspector of Factories in his letter to the Collector, dated 27th July 1894, while reviewing the proposals of Colonel Waters, says :—" It appears, however, that the proposed " scheme of ventilation is not consistent with the terms of Rule 5, as it neither " provides for the 10 feet opening nor admits that the ventilation is good and " requires no improvement—the proviso which enables an Inspector to exempt a " Mill from the operation of the first half of the Rule."

In the correspondence that arose on the issue of the Rule in 1892, it appears to have been conceived that the 10 square feet opening was " within the " allowance in most of the Bombay textile factories;" and, with a view to showing whether this was so, the Association, at the instance of the Collector, issued to its members a printed Form on which they were to make a return of the various factors. These returns were sent in to the Collector on the 10th March 1893.

The next serious opening of the question was made by a letter from the Collector, dated 5th April 1895, with which were forwarded Reports made respectively by Dr. Waters, Presidency Surgeon and Joint Inspector, by Mr. Shore, Presidency Inspector of Factories, and by Mr. A. M. T. Jackson, the Chief Inspector. The proposals made by these three officials were as follows :—

Dr. Waters.—Fixed venetians and ventilating shafts, vertical, through floors.

Mr. Shore.—Venetians suitably placed in existing window frames.
(These two proposals were afterwards recommended conjointly by the Collector in his letter of the 16th May 1895.)

Mr. Jackson.—The appointment of a Committee of Sanitary Experts to lay down general principles and standards of ventilation for the guidance of Inspectors and Millowners.

The Sanitary Board, to which the question was referred by Government, recommended that the ventilating shafts should be connected with the chimneys of the factories to secure draught.

To the first and last of these recommendations the Association objected that they would be penalised by the Insurance Offices. Mr. Jackson's recommendation was apparently ignored by Government.

It is unnecessary to detail a correspondence that appears to have proceeded without appreciation of the essential absurdity of the Rule discussed, but it may be said that, on the 27th of June 1895, a conference took place between the Collector and other officials on the one hand and a Deputation of the Association on the other. It was then agreed "that the Inspectors should jointly select a room—for " choice, the mule spinning room of a three or four-storied Mill—in which the " experiment should be tried of inserting venetians instead of some of the panes of " glass in the lower and upper parts of the Mill windows in the manner proposed " in Mr. Shore's report, with a view to testing its effect upon the atmosphere of " the room." Eventually, the Khatau Makanjee Mill was fixed upon, and, on the

11th November 1895, the Chief Inspector of Factories wrote appointing the morning of the 14th idem for a meeting there with the Agents of the Mill "in "order to explain how the alterations should be made." The experiment was thus to be made under the direction and supervision of the Inspectors, the part of the Association being limited to the payment of the cost. This part of the agreement was performed, but there is nothing to show that the official supervision on which the Association relied in consideration of its expenditure was ever given. In March of 1897 the bill for the cost of the experiment (amounting to Rs. 873-12-11) was presented, and the Secretary then wrote to the Chief Inspector of Factories, begging that the result of the experiment might be communicated to the Association. The reply, dated 17th May 1897, was that "no attempt "to gauge the result of the experiments in ventilation has been possible while "the spinning rooms have been empty, and that in any case a proper test "must embrace various weather conditions, and must, therefore, be spread over "several months." It was added, "I would point out in this connection that the "experiment at the Bombay Cotton Mill, which was also carried out by the "Agents of the Khatau Makanjee Spinning and Weaving Company, still "remains incomplete." Without any desire to ignore the unusual strain that was thrown at that time upon all Government departments, your Committee feel that the abortive nature of the experiments in question was due mainly to the failure of the Inspectors to give to them the necessary attention, and the question may yet arise whether and on what conditions the Association can reasonably be expected, altogether apart from any questions of legal obligation, to undertake future expenditure for a similar purpose.

The report of the Association for 1897 contains the following reference to the question :—

"The Committee have not yet been favoured by Government with a report in connexion "with the experiments for the better system of ventilation in the Cotton Spinning and Weaving "Mills in Bombay which were taken in hand, in 1895, by the Chief Inspector of Factories. They, "however, notice that reference is made to the subject in the *Provincial Report on the working of "the Indian Factories Act in the Bombay Presidency for the year 1896*; and in a memorandum "attached to that publication the Collector of Land Revenue, Customs and Opium, Bombay, "says :—

'In regard to the ventilation of Cotton Mills, it is disappointing to find that the lengthy 'consideration and discussion described in the Bombay Chief Inspector's Report for 1895 have 'as yet at least come to nothing. Some public spirit was shown in undertaking experiments, 'but remarkable procrastination in carrying them out, and of the one which is complete, no fair 'opportunity for scientific test had been obtained up to the date of the Bombay report. This 'experiment does not include a vertical outlet for foul air, which is regarded by medical opinion 'as an essential part of any satisfactory scheme; and, even as far as it goes, it is pronounced a 'failure by the Managers and Spinners of the Mill where it has been tried. The expert In-'spector inclines throughout the controversy to the Spinners' side, and, at all events, it will not 'do to insist on ventilation at the expense of production without very careful consideration. It 'will soon, however, be time to pass final judgment on these experiments, but it may be noted 'that the present Chief Inspector is considerably less sanguine of their success than was 'Mr. Enthoven.'"

It should be noted that no information as to the result of the experiments in question was received till November 1902, after a further exchange of letters between the Association and the Collector.

This recent correspondence was opened by a letter from the Collector, dated 17th July 1902, in which it was stated that the subject of the ventilation of factories had for some time engaged the writer's attention and that, although he was aware that a systematic and thorough scheme of improvement had long been essential, he had, "in consideration of the hardships caused to Millowners "by the vicissitudes of plague and famine," hitherto allowed the Inspectors to let the matter wait. He continued to say that, as better times seemed to have come, he now asked that the Association should help him in carrying the matter through. He disclaimed any wish to enforce the provisions of Rule 5 "inas- "much as to do so might interfere with certain industrial processes," and expressed his willingness to put off taking that step if the Association could submit for his approval some system of ventilation that would ensure circulation of pure and not over-humid air in all parts of the Mill, and which all Millowners would undertake to adopt when it had received his approval. In conclusion, it was requested that the matter should be treated as urgent.

Simultaneously, advices were received from a number of members that the Chief Inspector of Factories had made an entry in the books of the various Mills to the effect that the ventilation was bad and that, unless a satisfactory system were introduced before the next quarterly inspection, steps would be taken to enforce the provisions of Rule 5.

Having regard to the admitted impracticability of the rule in question and to the history of the affair as sketched above, the Committee felt that the peremptory attitude assumed by the Inspectors and Collector was uncalled for, but believed that it probably proceeded from some of the facts having been lost sight of. Being anxious to avoid the friction that might arise from their stating these views in writing, the Committee replied to the effect that they did not expect that even an approximation to the conditions prescribed by Rule 5 would be attainable and that, before any attempt could be made in that direction, it would be necessary to arrive at some general principles. They, therefore, named certain gentlemen who they had appointed to wait upon the Collector, and they begged that he would select a day on which he could receive them.

The Collector's reply, dated 12th August, was to the following effect:—That some six years ago he had made several proposals to secure the better ventilation of factories, but none of them found favour with the Association; that he must therefore request the Association to devise some scheme or schemes that would ensure the desired end; that he saw no reason for any discussion, personal or in writing; that both he and the Association were aware what was required; that he had suggested means of attaining it without success; and that it was now left for the Association to make its suggestions. In conclusion, he called the attention of the Association to the desirability of taking the matter in hand at an early date, as he had every intention of applying strictly the provisions of the law and had only delayed doing so out of regard for the effects on the industry of plague, famine and other causes.

The tone thus imported into the correspondence and certain of the assumptions contained in the letter made it impossible for the Committee to proceed further on the ordinary lines. They, therefore, asked the Secretary to see the

Collector; and after some time it was arranged with that gentleman that the correspondence should be resumed as from the receipt of the Collector's letter of the 17th July. It was understood that that of the 12th August was to be treated as non-existent; but as the Collector refers to both of these letters in that of the 3rd November, and states that they were written with a full knowledge of the facts, it is necessary to record the substance of the second.

In pursuance of the arrangement thus made, the Secretary, in a letter dated the 27th September, began by explaining that the Committee did not dispute that, as the law stood, he was technically right in requiring compliance with Rule 5; but added that the rule was impracticable, and that it was not incumbent on the Committee to devise any system until the law was so modified as to give assurance that the system when devised would be permanent. Nor was it in their opinion possible to evolve any system that would be applicable to all the mills in Bombay. All that could be done would be to lay down general principles as was done in the Factories Acts in Britain. It was added that in any case the Committee could not believe that the letter under reply had been written either with appreciation of the extent to which Rule 5 was out of relation to all serious enactments on the subject of ventilation or with knowledge of the efforts already made by the Association to solve the difficulty.

The facts as to the institution of experiments at the Association's cost were then outlined, and mention was made of the circumstance that up to the time of writing the Association had not been favoured with any information as to the results of those experiments.

The text of the rule was then quoted, reference was made to the official recognition of its impracticability by the Collector of Customs on 5th April 1895, and the extraordinary nature of the rule in question was for the first time clearly set forth on the lines pursued in the opening paragraphs of this chapter.

The Committee went on to submit that in the face of the facts stated—all of which could be easily verified—it would be well to omit from discussion of the subject any mention of the astonishing enactment in question, and to have it replaced as soon as possible by one capable of guiding successive Factory Inspectors in their work. In reply to the proposal that the Association should devise a system of ventilation for the Collector's approval, the Committee expressed the belief that the Millowners of Bombay would no doubt submit to any reasonable standard of ventilation that might be laid down by Government, and they offered to co-operate in an effort to arrive at such a standard; but they submitted that it was strictly within the province of Government, so recognised by the existence of Rule 5 such as it was, to formulate general principles. It was suggested that much could be done in the way of clearing the ground if the Collector would receive a small deputation of members familiar with the difficulties, and the Committee offered to appoint a Special Committee to study the whole question afresh and to meet him on a day to be selected by him. Finally the hope was expressed that in such orders as might eventually be passed full consideration would be given to the facts that the Bombay Mills had been built at great cost without Government's having laid down any practicable rules for ventilation and that excessive stringency at so late a time would make a very real hardship.

This letter was replied to on the 3rd November, when the Collector explained that the delay had arisen through the absence of one of his assistants. He stated that his previous letters had been written with full knowledge of the efforts made by the Association and by his predecessor to arrive at some solution of the difficulty. He expressed regret that the Department had not informed the Association of the result of the experiments undertaken in 1895.

He then went on to contend that if the " 10-foot square " lateral opening were eliminated as impracticable, it would lie with the Inspector in each case to decide whether the ventilation was adequate. It has already been explained that under the existing rule the Inspector has in fact no power to require any measures other than the making of the openings in question. To prevent any misapprehension it may also be well to point out that the rule does not prescribe openings of " 10-foot square " as the Collector inadvertently wrote it, but openings of *ten square feet.*

The Collector went on to say that, while it might not be possible to prescribe any general method of attaining the desired end, it was desirable to arrive at some understanding as to what should constitute good ventilation, with a view to being able to approach Government and ask them to define this once for all, after cancellation " perhaps " of the rule for lateral openings of the size recognised as impracticable. He suggested that the new definition might perhaps take the form of a rule prescribing a certain volume and movement of air, a limitation of the amount of humidity and of the amount of Carbonic Acid Gas, and so on. In conclusion, he asked that the Association should lend him copies of the Acts in force in England (excepting the Cotton Cloth Factories Act of 1889) and any literature on the subject that put the facts clearly and concisely, and should favour him with some pronouncement as to the atmospheric conditions that the Association would be prepared to secure and which they considered sufficient to ensure the health of Millhands. He expressed the hope that, with this to work on, he would be able to take expert medical advice and submit the case to Government for orders.

The Secretary had in the meantime written to London for copies of the various Acts in force in the United Kingdom; and in their reply to the Collector, dated 8th November, the Committee informed the Collector that on receipt of these Acts they hoped to make a further communication with a view to establishing some general principles of ventilation applicable to Indian mills.

The publisher to whom the order for the Acts in question was sent forwarded a copy of a book entitled " The Law relating to Factories and Workshops, Part II.," of which gives the texts of the new Act with Notes by a well-known barrister of the Inner Temple. About the same time a review appeared in the *Times* of a *First Report of the Departmental Committee appointed to inquire into the ventilation of Factories and Workshops;* and a copy of this Blue Book was at once written for and duly received. The text of the Report is appended. The Appendices therein referred to are preserved in the library of the Association.

FIRST REPORT OF THE DEPARTMENTAL COMMITTEE APPOINTED TO INQUIRE INTO THE VENTILATION OF FACTORIES AND WORKSHOPS.

To The Right Honourable ARETAS AKERS-DOUGLAS, M.P.,

His Majesty's Principal Secretary of State for the Home Department.

15*th August* 1902.

Sir,

We have the honour to submit to you the following First Report on the Ventilation of Factories and Workshops :—

It is evident that the air breathed by the employés in a factory or workshop can be kept pure in two ways : (1) by constantly renewing from outside the whole of the air of the room in which work is carried on : (2) by removing impurities locally, or otherwise preventing them from ever mixing with the air breathed. The former process may be distinguished as *general*, and the latter as local ventilation. As a general rule, dust and fumes can best be dealt with by local ventilation or other means, whereas impurities due to the presence of employés, and of lights burning, must be got rid of by general ventilation. In the present Report we propose to deal only with general ventilation, which is necessary in all cases, whether local ventilation may also be required or not. In a further Report we hope to refer to *local ventilation* and other means of preventing injury to health by dust and fumes.

All authorities are agreed that health depends to a large extent on a constant and abundant supply of fresh air uncontaminated by other individuals or by any substances which cause discomfort or contain poisonous, infective, or otherwise harmful material. The air of a building containing human beings cannot, however, be kept absolutely pure ; and all that can be demanded for the air of factories and workshops is that it should be kept as pure as is reasonably practicable.

By Section 7 of the Factory and Workshop Act, 1901, it is enacted that "in every room in any factory or workshop sufficient means of ventilation shall be provided and sufficient ventilation shall be maintained :" also that "the Secretary of State may, by Special Order, prescribe a standard of sufficient ventilation for any class of factories or workshops, and that standard shall be observed in all factories or workshops of that class, and an order made under this power may supersede any provision of this Act or order of the Secretary of State in cotton cloth factories."

By the effects of the air upon the senses one can roughly judge as to whether a room is sufficiently ventilated according to one's own subjective standard ; but the judgments of different persons agree only very roughly, and are liable to be affected by various incidental circumstances. It is therefore desirable to have an objective criterion of what constitutes reasonably "sufficient" ventilation.

Except in cases where artificial ventilation by fans is employed, it is seldom practicable to measure directly with an anemometer the amount of air supplied per person in a building ; and the only practical objective criterion hitherto legally recognised in general administration in connection with all factories and workshops is the existence of a certain minimum (250 cubic feet) of air-space per person employed. As is shown in Appendix II, however, the existence of a certain cubic air-space per person affords no reliable guarantee of reasonably sufficient ventilation, and, indeed, the most highly vitiated air met with by the Committee was in rooms with an air-space of about 10,000 cubic feet per person, or forty times the legal minimum.

It has long been recognised that the best objective criterion of the sufficiency of ventilation in ordinary rooms is the proportion of carbonic acid in the air ; and one of the chief points to occupy our attention was the question whether it is practicable to make use of this proportion as a legal standard of sufficient ventilation. The objection to such a standard appeared to be

that the analysis of the air, if carried out with sufficient accuracy, was a troublesome and therefore expensive process, involving (1) the collection in a large bottle, and conveyance to a laboratory of a sample of the air ; (2) laboratory manipulations requiring considerable expenditure of time.

With a view to meeting these difficulties a method of analysis, which we have made use of throughout the experimental part of our inquiry, was devised by one of us, and is described in Appendix III. By this method the analysis can be done on the spot within less than five minutes, if the apparatus, which is easily carried about, is brought to the room requiring examination; or the sample required can be collected in a very small bottle, such as can be carried without inconvenience, and the analysis made at leisure.

In order to obtain a general idea as to the means of ventilation commonly adopted, and the proportions of carbonic acid actually present in the air under ordinary conditions of work, we have without previous notice visited a large number of factories and workshops and made analyses of the air—in many cases on the spot. The results will be found in Appendix I.

Standards have been laid down by various authorities as to the proportion of carbonic acid which ought not to be exceeded in the air of rooms. These standards are based partly on the unpleasant effects of air containing more than a certain proportion of carbonic acid due to respiration or artificial lights, and partly on what has been found to be a practically attainable standard of purity. The limit originally proposed by Pettenkofer * was 10 volumes of carbonic acid per 10,000 volumes of air or 6 volumes in excess of the proportions commonly found in the air of towns. De Chaumont † as the result of observations on the air of barracks, proposed as low a limit as 6 volumes per 10,000. On the other hand, Carnelley, Haldane, and Anderson ‡ concluded in 1887 that for the very crowded elementary schools of this country a lower limit than 13 volumes could not for practical and financial reasons be fixed, although with the present improved facilities for mechanical ventilation a much lower practical limit could doubtless now be assigned. From our own observations we have come to the conclusion that it is reasonable to expect that under ordinary circumstances 10 volumes should not be exceeded in factories or workshops unless gas is burning.

The only instance, in which a standard of purity has been fixed by law in this country, is in the case of the artificially humidified air of cotton-cloth weaving sheds. The maximum limit of carbonic acid allowed at any part of the factory is 9 volumes per 10,000. This regulation, which is only enforced during daylight, has resulted in great benefit, but is in our opinion somewhat stringent except with a view to cases in which much gas is burnt during morning or evening hours in winter.

We are of opinion that it would materially assess towards efficiency in the ventilation of factories and workshops generally if a maximum limit of carbonic acid allowable in the air during both daylight and gaslight were fixed in virtue of the power conferred on the Secretary of State by the Factory Act of 1901. We have found that as a general rule employers, and particularly the larger ones, are willing and anxious to do all that is within their power to secure efficient ventilation of their factories and workshops, and that frequently the result of their efforts is admirable. Where failure occurs this often depends on thoughtless objections on the part of a small minority of the employés. We believe that the laying down of a legal standard would lead to such objections being overcome, and to much more attention being given to the proper utilisation of existing means of ventilation. We also believe that it would have a good effect in preventing much wasteful expenditure on inefficient ventilators, &c., as it would supply a ready test of efficiency. While it would act as a means of putting pressure on backward or negligent employers, it would serve to protect from unjust criticisms those who have done what can reasonably be expected.

---

* Uber den Luftwechsel in Wohngebäuden, 1858, p. 78.

† Proceedings of the Royal Society, No. 168, 1875 ; No. 171, 1876.

‡ Philosophical Transaction of the Royal Society, 1887, B. p. 102.

We also think that the legal limit ought not to be fixed as low as the ordinary working limit. It may easily occur (particularly where ordinary methods of ventilation without the use of fans are employed, as is generally the case) that the air of a room which is usually fairly well ventilated, has in consequence of exceptional conditions become temporarily, or in particular parts, somewhat foul. A margin ought therefore to be allowed in order to meet such cases; also to cover any uncertainties due to slight variations in the proportion of carbonic acid in the outside air, or to unavoidable errors of analysis.

In sedentary occupations the objection on the part of employés to proper ventilation depends sometimes on the absence of proper warming arrangements during cold weather. This often leads to further vitiation of the air through the lighting of gas-burners for heating purposes during the day—a wasteful and objectionable plan. The establishment of a legal maximum limit of carbonic acid would probably conduce to the provision and use of proper heating appliances in such cases. We are of opinion that heating arrangements capable of maintaining in case of necessity a temperature at least 25° F. above that of the outside air, in the absence of lights and employés but along with adequate ventilation, should be provided in all factories and workshops where the occupation is sedentary or involves little muscular exertion, and should be regularly used in the colder weather. In such occupations the temperature should not be less than about 60° F., particularly where the work involves delicate manipulations with the hands.

RECOMMENDATIONS.

After very careful consideration we desire to make the following recommendations :—

1. That in exercise of the powers conferred on the Secretary of State, by Section 7 of the Factory Act of 1901, such a standard of ventilation should be prescribed for all classes of factories and workshops not otherwise specially dealt with, that the proportion of carbonic acid in the air at about the breathing level, and away from the immediate influence of any special source of contamination, such as a person or light, shall not (except on very foggy days, when no tests should be made, on account of the vitiated state of the outside air) rise during daylight, or after dark when only electric light is used, beyond 12 volumes of carbonic acid per 10,000 of air, and that when gas or oil is used for lighting the proportion shall not exceed 20 volumes after dark or before the first hour after daylight; the only exception to this rule to be in cases where the extra carbonic acid is produced in other ways than by respiration or combustion, as in breweries, &c.

2. That in the case of cotton-cloth factories with artificially humidified air the occupier should have the option of coming under the regulation just mentioned, instead of remaining under the existing regulation.

3. That Inspectors of Factories should inform employers of the results of any official analyses of the air in their factories or workshops, should give notice that the ventilation is deficient to any employer in whose factory or workshop the above proportions have been found to be exceeded, and at the same time supply, so far as practicable, information as to the nature of any defect noticed; and that legal proceedings should not be taken against an employer unless, after a reasonable interval following such notice, the stated proportion is found, on an average of two or more samples taken in different parts of the room, to be again exceeded by one volume or more, and he is unable to show that he has taken measures reasonably calculated to secure the requisite ventilation.

4. That arrangements be made by the Factory Department of the Home Office for the analysis by a specially qualified person or persons of samples of air collected by Inspectors (*see* Appendix III), and that any analysis on which a prosecution immediately depends shall have been performed by such qualified person or persons.

5. That arrangements be made for Inspectors of Factories to have the use, when desired, of a properly tested portable apparatus for estimating on the spot the proportion of carbonic acid in air.

In Appendix II we have endeavoured to give a general account of the condition on which efficient ventilation depends. We trust that this information may prove of service both to the Factory Department and to Employers.

We have the honour to be, Sir,
Your obedient Servants,
JOHN SCOTT HALDANE.
EDWARD H. OSBORN.

CHARLES R. PENDOCK, Secretary.

It appeared to the Committee that the lines laid down in this Report would not improbably lead to a solution of difficulty in Bombay ; and, as it is obviously to the interest of the industry to meet all reasonable requirements in the matter of sanitation, steps have been taken to obtain one of the apparatus referred to in paragraph 8. This has not yet been received, but advices indicated that it will shortly be to hand.

Meantime it is satisfactory to record that a further letter has recently been received from the Collector, intimating "that Government will be prepared to "co-operate with the Association in investigating the extent to which the air in "Cotton Mills is vitiated by the presence of impurities, by lending the services of "a trained analyst or in such other manner as may be agreed upon." The letter concluded with an invitation to the Association to co-operate in the matter and to appoint a deputation to meet him and arrange the necessary preliminaries.

This letter may be welcomed as showing the sincere wish of the Collector to effect a reasonable and final settlement of a matter that has caused considerable trouble, and as opening a prospect of such settlement. Your Committee has, of course, so welcomed it, and in responding to the invitation to appoint a deputation, they forwarded for the perusal of the Collector both the book upon the Factories Act of 1901 and the Report of the Departmental Committee already alluded to. (Appendix **B.**)

ALLEGED SHORT REELING OF INDIAN YARNS.

It may be remembered that at the Annual General Meeting of the Bombay Chamber of Commerce, held on the 12th of March 1902, certain speakers alluded to an alleged practice of short reeling of yarns in some Indian mills not named. In the Report of the Chamber submitted at that meeting, the following words occurred :—"The Committee, while recognizing the importance of the question and "the desirability of obviating the necessity for legislation of an inquisitorial kind, felt "that the Bombay Millowners' Association would probably appreciate these "considerations, and that the matter was one that might more fittingly be taken "up by that body. It was therefore regarded as more courteous to defer action "pending some declaration of the course to be taken by the Millowners' Associa-"tion. Up to the time of preparing this Report the Committee has received no "intimation of any movement in the matter by the Millowners' Association." Certain of the speakers having referred to the question in the same strain, Mr. John Greaves, the Chairman of the Millowners' Association, who was present, remarked that, judging from what Mr. Wright had said, no specific case had been

presented; that the Millowners' Association had no intention of disregarding the question; but that full details were required before it could be specifically gone into.

Mr. Armstrong, the retiring Deputy Chairman of the Chamber, said that Mr. Greaves had apparently misunderstood Mr. Wright's remarks: that what Mr. Wright had said was that no specific instance had been brought before the Chamber showing that the present law could not cope with the evil; and that as a matter of fact various cases of short reeling had been brought before the Chamber.

Mr. Greaves enquired whether they had been sent on to the Millowners' Association; and on Mr. Armstrong's replying that they had not, Mr. Greaves stated his opinion that they ought to have been.

A fortnight later the Secretaries and Managers of the Southern Mahratta Spinning and Weaving Company, Limited, who are Members of the Association, wrote in to the Committee of the Association, submitting an extract from a recent Report of the Bangalore Woollen, Cotton and Silk Mills Co., Ld., relating to this question. The extract was as follows:—

"The importation into Mysore from the Bombay Presidency of yarn of falsely described "counts and lengths is increasing and is now a matter of serious consequence to these mills. "Yarn actually only 18's and correspondingly short reeled is frequently sold as 20's, and as the "market difference between 18's and 20's is two annas per bundle, the honest producer is "handicapped to this extent. False trade descriptions of this kind are prohibited by the Mysore "Merchandise Marks Regulation of 1892, but though cases have been repeatedly brought to the "notice of the Police, we are aware of no instance in which action has been taken on our "representations."

The writers added that, as the question had recently been before the Chamber of Commerce, the above extract would probably be of interest to the Association.

The Committee replied on the 5th of April that they noted the substance of the quotation, but that they could not accept a general imputation against mills not named, and would beg to be informed of the names of the mills to which the accusation specially related.

No reply was received to the Association's request for fuller information; and, although the question was referred to by the Chairman of the Association at last Annual Meeting, the Committee was not able to go into the matter specifically until, on the 4th September, they were favoured by the Chamber of Commerce with copies of letters received by that body from the District Magistrate and Inspector of Factories at Sholapur, together with a statement showing the results of tests made at the request of that official, and a copy of a communication in the matter received from Messrs. Greaves, Cotton & Co.

In the first of the two letters from the District Magistrate and Inspector of Factories at Sholapur, it was stated that his attention had been called to complaints of short reeling of 20's yarns, alleged to be practised by mills at Sholapur to the detriment of mills in adjacent districts. He explained that the trade in 20's

constituted about 70 per cent. of the local output, since it was used for the coarse cloths worn by the mass of the population. He stated the complaints referred to as follows :—

"That the weavers want the full number of 20 knots in a bundle of 20's yarn, but like "a coarser thread than real 20's as stronger and less liable to break in weaving. It is, of course, "impossible to give the full number of knots of thicker thread and full length without "increasing the weight and consequently the cost; but increased cost means diminution "of profits if the price is not raised, while to raise the price means to lose the market; that "accordingly to keep the weight and cost the same as those of real 20's, and at the same time "meet the demand of the weavers for a coarser thread, the Sholapur Mills make up as 20's yarns "of lower counts, correspondingly reducing the length of the 840 hank; the weavers see the full "number of knots and a coarser thread and are satisfied, not knowing or caring that the length "is deficient, and refuse to buy honest 20's of full length, saying that the thread is thin and weak; "and that in this way dishonest goods labelled with a false trade description oust honest goods "from their natural local market, where they have previously commanded a legitimate "popularity."

The writer recognised that absolute exactness and uniformity were unattainable in an industry into which human agency entered so largely; and he expressed himself as not satisfied that the Sholapur Mills deviated to a serious extent, or more than other mills in the Presidency. He described the degree of variation found in many yarns examined, and instanced one of the complainant Companies as selling 18's and 19's under a 20's ticket.

In conclusion he intimated that he had forwarded to the Chamber four bundles of yarns, the product of the three Sholapur Mills and requested that the yarns might be tested and the results communicated to him.

In a subsequent letter, dated the 29th July 1902, the same gentleman, as Collector of Sholapur, intimated that he had forwarded also two other hanks of yarn which he requested the Committee to have tested along with those previously sent. In the same packet he forwarded for similar trial a bundle of yarn produced by one of the complainant Companies, and he pointed out that while the label declared the yarn to be of 18 1/2 count, the number of knots in the bundle was 20.

The results of the tests made by the Chamber were shown in a tabular statement which may be summarised as follows :—

				Averages of Five Tests.			
No.	1	Sample		Yards	845·2	Count	19·98
„	2	„		„	832·9	„	20·13
„	3	„	(Green Ticket)	„	796·3	„	19·33
„	4	„	(Yellow Ticket)	„	808·3	„	19·43
„	5	„		„	787·9	„	19·69

While the papers in question were still in circulation to the Committee, a letter, dated 17th September, was received from the Acting Secretary to the Government of Bombay in the Revenue Department, stating that the attention of Government had been drawn to the proceedings of the Annual General Meetings of the Chamber and of the Association so far as they related to the practice of short-reeling. There appeared to be reason to believe that there was in some mills in the Bombay Presidency a systematic violation of the law, and to fear that if it

were not stopped others might be forced to short-reel in self defence. The writer made the statement that "the purchasers who are defrauded have neither "the means nor the intelligence to prosecute, and one millowner can hardly be "expected to incur the odium of prosecuting another." In these circumstances, he continued, it became a matter for consideration whether Government should not undertake prosecutions if they were necessary to put a stop to the practice. But before taking any steps in the matter, they desired to have the opinion of the Association as to procedure to be preferred: It seemed to Government to be undesirable that use should be made of any Rules under the Cotton Duties Act to obtain information for this purpose; and it was therefore suggested that the Inspector of Factories should purchase in the open market and in the presence of witnesses yarns which would thereafter be tested at a time and place to be notified in advance to the manager of the producing mill. In event of the tests showing a false trade description to have been used, application would be made to Government for permission to prosecute. It was explained that if action on the lines indicated were to be taken it could not be confined to Bombay but must be applied equally to all other provinces. The Association was requested to favour Government with their opinion at an early date.

The Committee, while clearly perceiving that such a practice as that alleged to be in existence would have a most injurious effect upon the trade and ought to be stopped, could not help feeling that the problem of so stopping it without risk of miscarriage of justice was a less simple matter than might be inferred from the letter of Government. Reeling is the only means by which yarn can conveniently be placed on a market distant from a mill, and the reel, while transforming the yarn into knots for packing, is also a measuring machine showing the hanks or leas of yarn. If all yarns went to the market containing 840 yards to the hank, short-reeling could not be said to exist; but unfortunately perfect exactness cannot be maintained when dealing with the production of a large mill, especially as the work has to be performed largely by human labour liable to error. Error in respect of length may result from several causes, one of the commonest being the negligence of the reeler (usually female) who fails to piece up a thread as soon as it breaks. With a bad reeler or even with a fairly good reeler, when dealing with cop bottoms and bobbin ends, this carelessness may at times be so gross as to produce results closely resembling those of deliberate fraud. In such cases the difference between the results of fraud and of mere carelessness is, or might be, so narrow that it might be difficult to distinguish. On the other hand, the weight test might at first sight appear to be a comparatively easy means of testing; but here again there are several practical difficulties. The spinning of low count yarns is somewhat irregular, and this fact is apparently recognised under the Sea Customs Act, Sec. 16, Cl. 32 IIIa, which allows a variation of $2\frac{1}{2}$ per cent. below or above the count named. So much is this the case that it is sometimes necessary to spin light or heavy yarns to make up the average.

Yarn, again, is extremely sensitive to moisture, and in using the weight test in India it would be necessary to know the difference of hygrometrical conditions prevailing at time of spinning and at time of weighing. Yarn is usually exposed for sale in bundles or loose knots, and the result of varying atmospheric

conditions would be so marked as to render the weight test unreliable for the legal definiteness requisite to a conviction. As a matter of fact, the results of the tests made through the agency of the Chamber of Commerce indicated short reeling to some extent, but not in the opinion of the Committee enough to show that it had been deliberate and fraudulent.

The Committee, in their reply to Government, addressed on the 27th October last, went into these technical points at some length in order to show the great difficulty of proving when fraudulent short reeling is present. The Committee stated that they did not doubt the existence of both kind of short reeling; but, under the circumstances recited, they could not see any way in which effective measures could be undertaken by Government. The weaver might be said to be unintelligent; but he knew well enough what he wanted, and his demand had created a market for the yarns of the descriptions complained of. He could not be ignorant that he got a greater length of cloth from the finer yarns, and if he was not too deeply in the debt of his sowcar, the fact of his buying the short yarn might be accepted as proof that he believed it to suit him best. The Committee deprecated short-reeling and confined themselves to pointing out some of the difficulties that would be encountered in any effort on the part of Government to put a stop to it by prosecution. With special reference to the suggestion of Government that it might be found necessary to make use of the Rules under the Indian Cotton Duties Act to obtain information in the matter, the Committee, in conclusion, pointed out that this could be done only in respect of yarns intended for sale in India and not in respect of those prepared for exportation to foreign markets. (*Appendix* **C.**)

PACKING OF BALES OF YARN FOR EASTERN PORTS.

See Association's Reports for 1893 *and* 1901.

It will be remembered that in the three months, November 1901 to January 1902, renewed correspondence took place between the Association and the Agents of the Conference Lines carrying Cotton and Twist from Bombay to the further East, with a view to ascertaining whether they adhered to the definition of sufficient packing, which had been laid down in the Liners' circular of the 8th February 1893. No explicit reply was elicited from the Liners, the burden of their argument being a reiteration of the statement that these matters must be settled by their agents at port of destination. They did not expressly deny that the circular alluded to had defined sufficient packing; but, on the other hand, they evaded any specific admission on the point, and it was evident from the terms of the correspondence that they did not intend to consult their agents in the matter except "with the object of ultimately defining what should be regarded as sufficient." As the difference appeared to the Committee to be a matter of words, the Liners were, in January of 1902, invited to consult their agents for the purpose so stated.

Nothing was heard of the matter until certain claims for damage of goods shipped to China in the last monsoon were made by the shippers and rejected by the agents of the Conference Lines.

Thereafter, on the 27th October 1902, the Association received from a number of the principal shippers of twist for the eastern markets a letter, in which

the Committee was once more invited to aid in the endeavour to get the question of responsibility for such damage settled. The writers, after alluding to their knowledge of the Association's futile endeavours to get the Liners to define sufficient packing, stated that the losses and annoyance caused to shippers by the arbitrary rejection of their claims in respect of ship-damage were becoming intolerable. It was suggested that the Shipping Companies should declare in so many words—to be claused, if desired, in the Bill of Lading itself—what packing they would consider sufficient, and that claims should thereafter be dealt with in conformity with that declaration. The Association was requested to re-open the question with the Liners.

Two days later the Conference Lines wrote in to the Committee in terms which it is well to quote textually. They were as follows :—

"Referring to previous correspondence on the subject of packing of bales of yarn we "beg to state that, in our opinion, the *minimum* which should be held to constitute sufficient "packing to protect them is a covering of good tarpaulin—not the very inferior substitute "frequently now used—and at least one outer cover of *good* gunny, but preferably *two*. The "tarpaulin should protect the entire bale, not merely the sides or ends.

"We would at the same time remind you that as claims are paid in accordance with the "terms of the Bill of Lading at Port of destination it necessarily rests with our representative "there to determine whether the ship is liable or not. We are however sending a copy of this "letter to Hongkong and Shanghai for the information of our agents there."

The Committee naturally felt that the matter had hardly been advanced by a definition qualified by the introduction of the word "minimum," by the underlining of such a vague word as "good," by the uncertainty as to whether the minimum comprised one gunny or two, and by the final provision that in any case it would lie with the Ship agent at port of destination to decide the question of liability. They noted also with some surprise that in the letter written nine months after the Shipping Companies had undertaken to consult their agents with a view to a proper definition, even the vague definition in question was advanced only as an expression of the writers' individual opinion, and that a copy of it was being sent "for information" to those whom they had undertaken to consult.

On the 8th November the Committee wrote to the Liners acknowledging the receipt of their letter and mentioning that it had been considered together with one previously received from the shippers of yarn. Regret was expressed that the ostensible definition of sufficient packing now given was in itself indefinite, and allusion was made to the fact that the Committee still awaited information as to the result of the consultation with Eastern Agents which had been promised in the Liners' letter of the 16th January.

In their reply, dated the 11th November, the Liners gave no additional indication of a disposition to remove the state of irritating uncertainty. While professing inability to perceive in what way their ostensible definition was indefinite, they explained "that nothing short of a complete inner covering of "good tarpaulin and one outer cover really of good gunny would suffice, though "two would be preferred." The wording of the last paragraph of the letter must again be given textually to indicate the nature of the Liners' attitude. "Our

"reference," they said, "to the fact that claims are settled at port of destination "was made because it must necessarily rest with our agents there to judge "whether the tarpaulin and gunny used is sufficiently good and stout to stand "ordinary wear and tear."

It was evident that for some reason the Steamship Companies preferred that shippers should remain in a state of uncertainty as to what packing would be considered sufficient. That being so, the Committee felt it to be useless to continue so inconclusive a discussion. But the matter has more recently entered upon a phase which offers some prospect of solution, but which is not yet ripe for report. (*Appendix* **D**).

THE INDIAN COTTON DUTIES AND THEIR EFFECT ON THE MILL INDUSTRY.

(*See Report of Association for* 1901, *page* 21.)

It was known for some time that Mr. J. N. Tata had, with the assistance of Mr. B. J. Padshah, been engaged on a statistical enquiry into the effect of the Indian Cotton Duties on the Indian Mill Industry; and in April of 1902 the Committee were favoured by Mr. Tata with a certain number of copies of the interesting memorandum in which Mr. Padshah had embodied the results of the investigation. These results were admittedly incomplete, and the deductions to be drawn from them were therefore somewhat inconclusive, seeing that a very large number of Milling Companies had failed to furnish Mr. Tata with the indispensable data for which he had asked. The Association itself suffers greatly from the same cause, and is frequently prevented from moving in the interests of the industry through lack of the specific information which alone would enable the Committee to substantiate contentions which they morally know to be sound. Reference was made to this subject under the heading of *Balance Sheets of Cotton Spinning and Weaving Companies* in last year's Report. Since there is no use in repeating under the same heading the same information as was given last year, it may be here stated that, as has so often been the case, the public spirit of those members who have taken the trouble to send in their figures is rendered nugatory by the negligence of others who, from one cause or another, fail to do so. Perhaps these other members do not understand that it is impossible to deal with large economic questions without a complete body of statistics, and that it is fruitless to go to Government with a representation that is not substantiated in a fairly comprehensive manner. The Committee feel that after the number of futile efforts they have made in the past to obtain the information required for a thorough examination of the Mill Industry, it is probably useless to make any further appeal in the matter.

They were able therefore to sympathise completely with Mr. Tata and Mr. Padshah in the difficulties they had encountered and in their consequent inability to arrive at any such definite conclusions as their labour would certainly have attained with a greater measure of co-operation. The Association had, at the instance of Mr. Tata, exerted itself to procure the information desired; but the response had evidently been imperfect, and the deficiency of the data, while it robbed the investigation of some of its value, and forbade any positive conclu-

sions, also barred any effective criticism of such conclusions as were advanced. For this reason the Committee, although they had read the memorandum with much interest, were unable to respond to the invitation which Mr. Tata was good enough to extend to them to suggest any fresh points for enquiry. A copy of the memorandum is preserved in the library of the Association, together with a supplement, in which Mr. Padshah modified certain points in the original monograph ; and the Committee feel that it is a matter for regret that an enquiry into so interesting a subject and undertaken with so much public spirit should have been to a large extent frustrated by lack of response on the part of those most directly concerned in the facts to be elucidated.

REDUCTION IN THE RATES OF FREIGHT ON COTTON FROM BOMBAY TO CHINA AND JAPAN.

(*Reference Association's Reports*, 1900, *pp.* 36, 64-65 ; 1901, *p.* 65.)

At the close of the year the attention of the Committee was drawn to the fact that since July 1902 the freight on cotton from Bombay to Japan had been reduced from Rs. 12 net to Rs. 10-4-0 per ton, and it was represented to the Association that such a reduction, not accompanied by a similar abatement of freight on Twist for China, placed shippers of the latter article at a serious disadvantage in their competition with the Japanese Spinners.

The Committee, in addressing the P. & O. S. N. Company and the Associated Liners on the subject under date 15th January 1903, again called attention to the extreme difficulty that had attended the Yarn business with China in the face of the fall in Silver, as was evidenced by the following remarks made by the Chairman of the P. & O. S. N. Company in his speech delivered at the Annual Meeting of the Shareholders :—

"China has hardly recovered from the war and commotion of the last three years. She is burdened with a heavy load of debt, unfairly aggravated, I think, by this depreciation of silver, and the condition of trade with that country is most unfortunate. Here is an extract from a telegram in the *Times* some days ago, from their correspondent in Shanghai, which runs:—'Meantime, the continued depression of silver is resulting in conditions calculated to produce a serious financial crisis. The import trade is practically at a stand-still, and as regards exports, there is no prospect of an immediate increase.' That is precisely our experience of the China trade at the present moment. Our last steamer despatched to that country was the same steamer as was despatched a year ago, and the freight this year is exactly one-half or rather less than one-half, the corresponding freight on the corresponding date last year."

The Committee referred to the correspondence that had passed between the Association and the Liners on the subject of Rebates of Freight in 1900 and especially to the letter in which the Shipping Companies had said :—

"We understand from your communication that your Association has no objection to a revision of freight on Twist, provided a corresponding increase is made in the rate of freight on the raw material to Japan."

The Committee submitted that their interests might reasonably have received from the Conference Lines such consideration as would have been involved in the maintenance of the principle of parity so recently affirmed, and in the granting of such a reduction of freight for China as the general decline in freight

rates would independently have warranted. The Committee therefore enquired whether the Conference Lines were prepared to make a reduction of Rs. 1-12-0 per ton in the freight rate for Twist to China, and to make such reduction retrospective to last July, so that Bombay shippers might be in a position to recover some of the ground that they had lost during the six months in which the disparity of rates had existed.

On 26th January 1903, a reply was received from the P. & O. S. N. Company and other Conference Lines stating that the question of a modification in rates of freight to China—which had been brought to their notice by the Association—had received their very careful consideration. It was explained by the writers that, as the Association had observed in its letter referred to above, they had been necessarily aware of the difficulty that had of late attended the yarn trade to China and that it was a condition of affairs which they naturally extremely regretted inasmuch as unless full and regular employment was given to the steamers which were appointed to serve the trade, the business at present rates and rebates assumed an unremunerative character. It was, however, explained that the Conference Lines were anxious to forward by any reasonable means in their power the interests of the spinning industry of Bombay with which they had so long been associated, and that after careful consideration, they had come to the conclusion that this could best be achieved by a reduction of Rs. 2 per ton in the gross rate on yarn to Shanghai on engagements made subsequent to 26th January 1903. The Conference Lines regretted that they could not make this reduction retrospective nor reduce the already very low Hongkong figure.

In again addressing the Conference Lines under date 16th February 1903, the Committee expressed their satisfaction that the Companies were prepared to concede Rs. 2 per ton on the gross rate on yarn to Shanghai on engagements made subsequent to 26th January 1903, but they were disappointed to find that they declined to make this concession retrospective and refused it altogether in respect of shipments to Hongkong. The Committee pointed out that as regards twist for Hongkong the net rate for that Port was Rs. 10½ per ton, while cotton for Kobe paid only Rs. 10 per ton. It was understood that the difference between these two rates was maintained in consideration of the loss or wastage of cotton in process of manufacture, and therefore reposed on the assumption that a ton of twist and ton of cotton contained approximately equal weights of material. But it was explained that this was not so, as the following illustration would show :—

Four bales of cotton contain two Candies or	lbs.	1,568
Less—Wastage 16 per cent. (though this is an extreme estimate)	,,	251
Yielding twist to the weight of	lbs.	1,317

On this Rs. 10 in freight is paid, while Rs. 10½ is paid on 2¾ bales of yarn containing only 1,100 lbs. If the principle of a parity of charge between cotton and yarn, as already recognised, was to be even roughly observed, either the 1,317 lbs. of clean cotton should pay Rs. 12-8, or the 1,100 lbs. of twist should pay only Rs. 8-6. It was shown that the Japanese spinner, as against the Bombay spinner, had, thus, in respect of freight, an advantage of some 20 per cent., and the Committee thought it would be recognised that under present conditions such an advantage was and must be decisive. It was hoped, therefore, that the Con-

ference Lines would see their way to making in the rates to Hongkong such a reduction as would equalise the position, and that in consideration of the grave injury done to the trade by such a disparity of rates operating since last July, the Companies would even now arrange to make a proportionate refund in respect of shipments since that date. It was added that the percentage of wastage—16 per cent. as above—was accepted for purposes of this calculation, simply because the Committee were told that the Companies had been accustomed to assume that figure. But the Committee pointed out that in their opinion it was misleading, firstly, because the actual loss in weight seldom amounted 16 per cent., and, secondly, because much of the loss in weight was represented by offals which were sold by the Japanese spinner after separation from the cotton.

The following reply was received from the Conference Lines on 19th February 1903 :—

"We understand that, at present net rates (which are Rs. 10-8-0 on yarn to Hongkong and Rs. 10-4-0, not Rs. 10 as stated by you, on cotton to Japan), you contend that the Bombay spinner is placed at a disadvantage and that his Japanese competitor is unduly favoured. The freight on yarn to Shanghai having been reduced, and shipments of that article from Bombay to Japan having entirely ceased for some years, the only conclusion at which we can arrive is that the competition to which you refer is in the Hongkong and Southern China markets. We have perused with interest the figures you put before us, but note with some surprise that you entirely ignore the fact, while arguing that the cotton and yarn rates should be placed on a parity, that the manufactured article from Japan has to pay a freight thence to Hongkong and other Southern ports of over Rs. 7 per ton. It is true, of course, that Hongkong yarn has to also pay freight to out-ports, but the difference in the total rate from Bombay to those places and that on the cotton which has been manufactured into yarn in Japan and thence re-shipped, will be found to be considerably in favour of the Indian article. Moreover, our information is to the effect that of the total export from Japan to China but a very small proportion has ever found its way to Southern China. Viewed in this light we venture to think that you will, on further consideration, perceive that the Japan spinner is not, under present circumstances, given an undue advantage."

Again on 2nd March the Companies wrote to the Association as follows :—

"Referring to our letter of the 19th February we beg to state that advices just received from Japan are to the effect that the rate on yarn thence to Hongkong has now been reduced and works out rather less than Rs. 4 per ton. This, while being a considerable reduction from the quotation given in our letter above referred to, does not, however, alter our contention that the export of Japan yarn to China is not being favoured by the rate of freight fixed on the Bombay product from this port to China."

This revised quotation was more than borne out by information already received by the Association. The Committee noted with satisfaction that the Conference Lines, in their letters referred to above, did not re-affirm the rate of "over Rs. 7 per ton," stated, in their first communication to the Association, to be the freight on yarn from Japan to Hongkong and Southern ports, but said that "it has now been reduced and works out rather less than Rs. 4 per ton." As a matter of fact, the Committee's advices were that the actual rate was 83 yen cents per bale. Taking 2½ bales per ton, this worked out about Rs. 3 per ton, Japanese yarn bales being larger than Bombay bales in measurement. The Committee urged the Conference Lines to make an equivalent reduction in the rates to Hongkong, and being confident that the Companies did not desire to ignore a

circumstance that must ultimately lead to a reduction of the shipments of yarn by the Conference Lines from Bombay, it was requested that the matter might be again considered with a view to placing millowners on the same competitive footing as formerly, and this not only prospectively, but retrospectively.

The Committee had not heard further from the Companies at the time of compiling this report. (*Appendix* **E.**)

ANNUAL REVISION OF TARIFF VALUES UNDER THE COTTON DUTIES ACT.

Mr. J. E. O'Conor, C.I.E., Director-General of Statistics to the Government of India, who had in previous years proceeded to Bombay in connection with the annual revision of tariff rates in respect of the Cotton Duties Act, was unable, on the last occasion, to confer in person with the Committee in the matter. The Collector of Customs in Bombay was, however, deputed by the Government of India to meet the members of the Committee who had dealt with the question in previous years, and a meeting was accordingly arranged, and took place, in the rooms of the Association on 15th December 1902, at which the following were present:—

Messrs. Sassoon J. David, Vithuldas Damoder Thackersey, C. N. Wadia, W. H. Brady, S. A. Nathan and the Secretary (representing the Association), Mr. E. Gray, I.C.S., Collector of Customs, Bombay, Mr. H. Wilkinson, I.C.S., First Assistant Collector, and Mr. J. D. F. Engle, Inspector of Factories.

The Tariff Schedule, embodying the alterations in classification and in prices, which had been prepared by Government, was discussed *seriatim*, and it was agreed that the rates shown in the subjoined table should be recommended to the Government of India for adoption. While these rates were under consideration, the attention of the Committee was drawn by the Collector of Customs, under instructions from the Government of India, to the proposed reduction of the valuation of Drills and Jeans from Annas 7-6 to Annas 6 per pound as compared with the price mentioned in certain of the Associations. Weekly Quotations of local-made piece-goods—namely, Annas $7\frac{3}{4}$ (average).

The Collector stated that, under the circumstances, he had advised the Government of India to accept Annas 7 as the rate for these goods, and expressed the hope that the Committee would consider it a fair price. In reply, the Collector was informed that while many mills had sold in the bazar at Annas 7 and less, and while discounts, &c., had to be deducted from that price, they accepted the price of Annas 7 fixed by him.

The modifications were in due course approved by the authorities and published in the following Notification :

FINANCE AND COMMERCE DEPARTMENT.

SEPARATE REVENUE.

COTTON DUTIES.

Calcutta, the 29th December 1902.

No. 6948-*S.R.*—In exercise of the power conferred by Section 7 of the Cotton Duties Act, 1896 (II of 1896), and in supersession of the Notification in this Department, No. 158-

S.R.,* dated the 9th January 1902, the Governor-General in Council is pleased to fix, for the descriptions of cotton goods hereunder specified, tariff values as follows with effect from the 1st February 1903 :—

		Tariff Value per lb. As. p.
	GREY GOODS, PLAIN OR BORDERED.	
1.	Blankets and blanketings, raised	8 0
2.	Chadars and bedsheets, plain, or with borders not over $\frac{1}{4}$"	7 0
3.	Dangari cloth, including khadi	7 0
4.	Dhutis, cholas or sallas, dupattas, and lungis, plain or with borders not over $\frac{1}{4}$" ...	7 6
5.	„ „ „ „ „ (calendered)...	7 9
6.	„ „ „ „ „ with borders over $\frac{1}{4}$" but not over $1\frac{1}{2}$"...	8 6
7.	Domestics, T-cloths, shirtings, longcloth, sheetings with borders not over $\frac{1}{4}$"	7 0
8.	„ „ „ „ „ (calendered)	7 6
9.	Drills and jeans, plain	7 0
10.	Fents	6 0
11.	Jaconets, unbleached	10 9
12.	„ bleached	11 9
13.	Madapollams, unbleached...	9 0
14.	„ bleached	9 9
15.	Mulls, unbleached	11 0
16.	„ bleached	12 0
17.	Printers	7 6
18.	„ (bhagavad)	7 3
19.	Shirtings, twilled, unbleached	8 9
20.	„ „ bleached	9 9
21.	Tent, sail, commissariat, and double cloth (dosuti)	6 6
22.	Zanzibar cloth, including American cloth...	7 0
	FIGURED OR COLOURED GOODS.	
23.	Bed-covers, quilts, twilled sheets, twilled chadars and table cloths with borders not over $\frac{1}{4}$" ...	7 6
24.	„ „ „ „ coloured warp or weft.	8 6
25.	„ „ „ „ coloured warp and weft.	9 3
26.	Bed ticking, plain or drilled	8 6
27.	Blankets and blanketings, raised	8 6
28.	Chadars, twilled, coloured (shawl checks)	12 6
29.	„ not twilled, coloured, calico wove, shawl pattern	10 3
30.	Cholis and saris (coloured)	10 0
31.	Cotton tweed, commonly called hunting cloth, plain or striped, including leheria, Thana susi, Thana twill and Thana check	10 0
32.	Cotton tweed, known as English checks, trouserings, and coatings ...	10 3
33.	Drill and jeans, striped	8 3
34.	„ „ checked	9 0

* Republished at pages 66 and 67 of Part I. of the *Bombay Government Gazette*, dated 16th January 1902.

		Tariff Value. per lb. As. p.
35.	Drill and jeans khaki dyed	... 11 0
36.	Fents	... 7 0
37.	Leno and ventula cloth	... 8 9
38.	Lungis, unbleached, coloured stripes and borders	... 9 6
39.	„ coloured	... 12 0
40.	Madras cloth	... 9 3
41.	„ „ (imitation)	... 9 0
42.	„ „ twilled, checked, coloured warp and weft	... 9 6
43.	„ „ handkerchiefs or lungis	... 12 0
44.	Napkins, unbleached	... 7 9
45.	„ bleached	... 9 0
46.	Susi, ordinary, coloured stripes	... 8 3
47.	„ „ „ weft	... 8 9
48.	„ „ fancy dobby pattern and ordinary susi checks ...	... 9 6
49.	„ „ „ „ coloured warp or weft	... 10 6
50.	„ „ flannel pattern, grey weft	... 8 9
51.	„ „ „ coloured weft	... 9 3
52.	Towels, Turkish, unbleached	... 8 9
53.	„ „ bleached...	... 9 9
54.	„ „ honeycomb, unbleached	... 7 9
55.	„ „ „ bleached	... 8 9
56.	Zephyr cloth	... 9 6
57.	„ „ striped and checked	... 10 6

Provided that any goods specified in the foregoing lists shall, when woven with borders of silk, be assessed to duty *ad valorem.*

THE WORKING OF THE BOILER ACT.

In May 1902, a member of the Association called the attention of the Committee to the procedure followed by the officials entrusted with the administration of the above Act in respect of two boilers imported from Europe for Mill purposes. It was stated that these boilers were on arrival inspected by the Senior Inspector in the ordinary way, but that that official stated that before a working certificate could be granted it would be necessary, firstly, to test the boilers hydraulically and, secondly, to test them under steam. The firm, which had imported the boilers, represented to the Association that all boilers imported into this country were, as a matter of fact, before dispatch, tested hydraulically in England at the Makers' works by a competent and independent Insurance Company's Inspector, and that for the service so rendered a fee was paid by the firm who had purchased the boiler. Under these circumstances, it appeared to the writers that the procedure followed by the local authorities in insisting on a fresh test in Bombay was unnecessary and vexatious, seeing that no accident to a boiler of large capacity had occurred in any local factory. It was accordingly represented to the Association that the rules governing the inspection of boilers were unduly cumbersome, and that the Association should, in the interests of

Millowners generally and importers of boilers in particular, represent to Government that the rules in question should be so modified as to avoid a second test being undertaken, without at the same time impairing the efficiency of the ordinary rules of inspection, which the writers considered was the aim of Government in instituting the Boiler Inspection Act.

The Committee considered the matter in all its bearings; but it seemed to them that it was one that more particularly concerned individual importers, and they therefore suggested to the member who had addressed them the propriety of making a representation to the proper authority and of informing the Association in due course of the result of such representation.

KEEPING FIRES IN BOILERS AT NIGHT.

The question of the practice of keeping fires in mill boilers all night, and under steam pressure, in the absence of an Engineer, was brought to the notice of the Committee in September 1902 by the Collecter of Bombay, who stated that such practice was clearly dangerous and contrary to the provisions of Section 6 (1) (*d*) of the Bombay Boiler Inspection Act of 1891. He accordingly inquired whether the Millowners' Association was prepared to effect the discontinuance of the practice *suo motu*. In a subsequent letter the Collector stated that he had been informed that the Insurance Agents were likely to create difficulties, and he wished to know what these difficulties were, and whether they were, in the opinion of the Association, insuperable.

Replying to the Collector, on 26th September 1902, the Committee inquired whether, in view of a more detailed consideration of the subject, it would meet the circumstances of the case if the day Engineer resided within a radius of half a mile and the existing night arrangements remained otherwise unchanged, and, if not, what arrangements short of the appointment of a special Engineer would be considered satisfactory. On 3rd October the Collector, in reply to this inquiry, stated that the Steam Boiler Commission had ruled that an engineer could not be held to be in charge of boilers unless present and on the alert. An engineer who had worked during the day could not, in his opinion, satisfy these conditions for boilers under steam at night, and he did not think that anything short of a third-class engineer in charge at night, and when the boilers were being raised to working pressure in the morning, could satisfy the requirements of the law. In view of these statements, a Special Committee was appointed to go more fully into the matter and report as to whether any arrangement could be come to whereby the industry might be spared the expense of employing engineers for work that in practice had been found to be performed satisfactorily and without accident by the serang or head fireman. The Special Committee were of the opinion that an experienced serang or head fireman was commonly a better qualified and more reliable person for the mere care-taking of boilers than even a third-class engineer, while the latter was subject to the additional disadvantage that he would probably require the services of a subordinate to do the actual work of firing should occasion arise. For this reason they felt that they would consider the security of their property to be complete at night so long as the engineer resided within a half mile radius of the mill and the

serang or head fireman actually in charge of the boilers was one holding a certificate of experience and competency from that engineer. In cases where the engineer did not reside within a half mile radius of the mill the Special Committee considered that no objection could be raised by millowners to the requirement that a third-class engineer should be in actual charge. In placing these views before the Collector, the general Committee desired to know whether, having regard to the merely technical sense in which the boilers could be said to be "working" at night and to the actual competency of experienced serangs or head firemen for the work to be contemplated, the Collector would not be prepared to accept the presence of such experienced serangs or head firemen together with the residence of the engineer within a half mile radius as fulfilling the purposes of the Act.

In the further reply received under date 4th February 1903, the Collector —with reference to the Committee's enquiry whether he was prepared to accept the presence of an experienced serang or head fireman—forwarded an extract from the minutes of a meeting of the Boiler Commission to whom this matter had been referred for opinion, and asked for the views of the Association regarding the recommendation of the Commission. The Collector further stated that, however differently the word "working" might be interpreted, it was beyond doubt that the Act required the presence of a fully qualified engineer when the pressure was raised in the morning. In practice, however, it was frequently the case that the engineer did not attend till the work had started. The Collector therefore called the attention of the Association to the irregularity, and requested the members to take such steps as were necessary to ensure a discontinuance of the practice.

The following is the relevant Extract from the Minutes of a Meeting of the Bombay Boiler Commission, held on 21*st January* 1903, *referred to by the Collector* :—

"The Commission are of opinion that while an engineer is physically capable of being in charge for 24 consecutive hours *on an emergency*, he should not be held to be capable for a longer period ; and hence in the case of boilers working for more than 24 consecutive hours, they consider that 16 hours is about as long as he should be asked to work and a relieving Engineer ought to be provided for the remainder of the 24 hours. This relieving Engineer, while being a certificated Engineer, need not, in the Commission's opinion, necessarily be of the same grade as the " Engineer-in-charge," *e.g.*, if the required Engineer-in-charge is a first-class Engineer, the " relieving " Engineer should hold a second-class certificate, and if the Engineer-in-charge is a second-class Engineer, the " relieving " Engineer should hold a third-class certificate : if, however, the " Engineer-in-charge " is a third-class Engineer, the relieving Engineer should hold a third-class certificate. One Engineer should always be within the 1,000 feet limit."

The Committee, after further consideration of the subject, addressed the Collector on 11th of March with the view of eliciting information as to the constitution and proceedings of the Commission referred to, or with a reference to the source from which such information could be obtained. In the absence of the

information indicated, the Committee said they found it difficult to form any opinion as to whether the demonstrated efficiency of serangs and head firemen for the purpose in question was in the knowledge of the Commission. It did not clearly appear from the Collector's last communication whether the Commission when making their recommendations, had before them the representation of the Association as to the fitness of serangs and head firemen, nor did the extract itself make any express reference to that representation. The Committee added that they had knowledge of no facts showing serangs and firemen to be insufficient for the purpose in view. On the contrary, they conceived that the best possible proof of their efficiency was to be found in the fact that this class of men had for some years been employed for the purpose named and this without any serious accident attributable to such employment. It was conceivable, they added, that the Commission had before them facts not known to the members of the Committee, but as practical millowners of long experience they could not help thinking this improbable; and they submitted that it would be consistent with the practice observed in the United Kingdom, in America and in other great industrial countries, that full weight should be given to the rarity of accidents in the past, and that no restriction should be placed on industry unless it were shown that serious consequences resulted from the absence of such restrictions. The Committee further pointed out that the employment of a certificated Engineer for the purpose in question would cost each mill at the very least Rs. 100 per mensem more than at present. There were 80 mills in Bombay alone, so that a total charge of Rs. 8,000 per mensem or Rs. 96,000 per annum would be imposed on the local mills without any good ground for that charge being known to the persons and companies so mulcted.

Up to the time of preparing this Report no reply had been received. (*Appendix* **F.**)

INDUSTRIAL WATER RATES IN BOMBAY.

(*See Association's Report for* 1901, *p.* 1.)

The representations addressed by the Association to the Municipal Commissioner with regard to the high rate at which water used for industrial purposes in Bombay is charged for by the Municipality were dealt with by the Standing Committee and the Corporation during the year under review. The following is a summary of the proceedings :—

'STANDING COMMITTEE—MEETING OF 10TH SEPTEMBER 1902.

'Considered—(*a*) Letter from the Commissioner, No. 22335, dated the 19th November 1901—Forwarding a letter to his address, dated the 14th November 1901, from the Secretary, Millowners' Association, who asks, for reasons given, for a reduction in the rates charged for water supplied for trade purposes.

'(*b*) Corporation Resolution No. 2011, dated the 30th June 1902 :—

'"That in order that the subject may be ready for discussion when the next Budget Estimates are considered, the Standing Committee be requested to expeditiously submit to the Corporation their report on the Memorial from the Bombay Millowners' Association regarding the rate charged for water supplied for trade purposes."

'(c) Letter from the Commissioner, No. 15588, dated the 28th August 1902:—

'With reference to Standing Committee Resolution Nos. 9911 of the 27th November 1901 and 2697 of the 9th July 1902, I have the honour to state that it is not necessary for me to criticise the representation of the Millowners' Association at any length. The facts relating to the cost of the water-supply, the water revenue, the distribution of the supply and the incidence of the charges on the various classes of consumers are well known, and have been several times brought to the notice of the Corporation by myself and my predecessors. The Secretary to the Millowners' Association has presented the case on behalf of consumers for trade purposes very fairly, and the request that the water taxation should be so re-adjusted that each class should pay for the water it consumes or wastes is one that is deserving of serious consideration. In so far as the Mill Industry is concerned, the subject resolves itself into two branches: (1) whether the water taxation is an unsupportable burden as alleged, and (2) whether the tax at its present rate is an unjust burden. As regards the first, I do not think the Association has made out a very strong case, as the arguments adduced are for the most part comparative. The water supplied by the Municipality must be a very small portion of that actually used by the Mills, and the statement I append, showing for the year 1901-1902 the water charges paid by each Mill, will, I think, make it clear that in no case can the charge be a very important item of working expenses. The second question must, I think, be answered differently, and the reasons adduced in favour of a reduction do not seem to admit of any valid refutation. In my letter No. 11413 of the 2nd August 1900 to the address of the Municipal Secretary, I called attention to the high rates levied in respect of water supplied for trade purposes and to Chawls and Bungalows by measurement. The latter have been, to some extent, relieved, but the burden on the former is the same as before, and while I am of opinion that the Mill Industry is not burdened seriously thereby, there seems to be no doubt that bleaching and dyeing and possibly many minor industries are hampered, if not altogether stopped, by the excessive charge. I have always been opposed to the revenue system that allows the bulk of the water to be sold at something like one-third of the cost price to people who do not appreciate its value, and who waste it, not only to the injury of more careful consumers, but also to the detriment of the general health of the City. I am not prepared to support the contention of the Association that water should be supplied for trade purposes at a lower rate than for domestic use, but I am very strongly of opinion that the existing inequalities should be removed, the charge to industries reduced if possible by one-half, and the revenue on valuation made to approximate more nearly to the actual cost of the water. I am aware that the Corporation have always desired to maintain a cheap domestic supply, but even if full cost price were levied, this object would be secured.

'2. In connection with this subject it is necessary once more to refer to the question of waste prevention which has been before the Corporation for many years past. I have, in my letter already referred to, reported at considerable length on the importance of measures to check waste being adopted, and will here only call attention to the fact that, if by lowering rates a new demand for water be created, the matter will become even more urgent.

'3. In conclusion, I have the honour to point out that any relief given to Industry must naturally be made up for by extra charges on water paid for by rating. The revenue derived from water for trade is in round figures Rs. 5 lakhs, and to reduce this by one-half must involve the raising *pro tanto* of the water rates. Whether the Standing Committee and the Corporation are willing to face this is entirely a matter for their consideration and decision. I am unable to propose any reduction in the total water revenue and shall probably have to propose an increase to reduce the existing recurring deficit.' (*Quotation ends.*)

At the Meeting of the Standing Committee referred to above the following proposals and amendments were brought forward :—

'Proposed by Mr. Vithaldas Damodher Thackersey, seconded by Mr. Manmohandas Ramji—

'That, with reference to his letters No. 22335, dated the 19th November 1901, and No. 15588, dated the 28th August 1902, the Commissioner be informed that the Standing Committee agree with him that the charge for water supplied for trade purposes should be reduced, and will be glad to consider any proposals for a fair reduction which he may include in the Budget Estimates for 1903-1904.

'2. That a copy of the Commissioner's letters, with accompaniments and a copy of this Resolution, be forwarded to the Corporation for information with reference to their Resolution No. 2011, dated the 30th June 1902.

'*Postponement*—Proposed by Mr. S. D. Khote—

'That consideration of the Commissioner's letter, No. 15588, dated the 28th August 1902, forwarding his remarks on the representation from the Millowners' Association asking for a reduction in the rates charged for water supplied for trade purposes, be postponed till the consideration of the Budget Estimates for 1903-1904.

'*Not seconded.*

'*Amendment*—Proposed by Mr. N. N. Katrak, seconded by Mr. Haji Yoosof Haji Esmail—

'"That the representation from the Millowners' Association, asking for a reduction in the rates charged for water supplied for trade purposes and the Commissioner's letter No. 15588, dated the 28th August 1902, submitting remarks thereon, be referred to a Sub-Committee consisting of the members named in the margin* for consideration and report."

No. 5525.

* The Chairman, The Hon'ble Mr. Ibrahim Rahimtoola, Mr. Vithaldas Damodher, Mr. Manmohandas Ramji, Mr. A. G. Viegas, Mr. N. N. Katrak.

'After discussion the original proposition was, with the permission of the Chairman and the consent of the meeting, *withdrawn.*

'The *amendment*, which now became the substantive proposition, was *carried.*'

INDIAN LIMITATION ACT, 1877.

(XIV OF 1877.)

Proposed Amendment.

On the 15th of August 1902 the Government of Bombay forwarded to the Committee of the Association a copy of a letter from the Government of India relative to a proposal to amend the Indian Limitation Act, and requested an expression of the Committee's opinion regarding it. The proposal originated with the Calcutta Trades Association and was designed to remove the hardship that results from the present state of the law under which a debt owed by a person at the time of death may run out and become time-barred before the questions of succession to his estate have been settled. The Chief Secretary to the Government of Bengal, in his letter to the Government of India, stated that it had been brought to the notice of his Government that instances occurred in which the creditor, in the absence of any near relatives of a deceased debtor or of any ostensible owner of his assets, had found a difficulty in choosing the defendant to his action for recovery of his debt. It was stated that in this country the difficulty was the greater that the laws of inheritance applicable to the people of different nationalities were very various ; and some of the many causes of delay peculiar to India, so far as questions of heredity are concerned, were touched upon. In effect many debts that were not barred at the time of a debtor's death became barred before representation to an estate has been settled.

The remedy suggested was to add to Section 13 of the Indian Limitation Act a provision that the interval between a debtor's death and the date of appointment of a legal representative of his estate should be excluded in computing the period prescribed by the Act.

There was no difference of opinion in the Committee as to the desirability of the amendment proposed, and this fact was duly communicated to Government. (*Appendix* **G.**)

CUSTOMS PROCEDURE IN CALCUTTA IN RESPECT OF YARNS SHIPPED FROM BOMBAY.

In February of 1902 a member addressed the Committee to the effect that all bales of yarn arriving in Calcutta from Bombay by sea were examined by the Customs Department on arrival, and that for slight defects found on such examination the merchant was fined and orders given for the re-shipment of the goods out of India. It was stated that no such examination was made of yarns arriving in Calcutta by rail, and that the effect of the special stringency in respect of arrivals by sea was to place Bombay spinners at a serious disadvantage as compared with mills in the Mofussil and Calcutta. The Committee was invited to make some representation to Government in the matter ; but, after discussion at a meeting attended by the writer of the letter, it was decided that the matter scarcely called for such action as was suggested.

CHINESE IMPORT DUTIES ON YARNS.

In March of 1902 the Under-Secretary to the Government of India, in the Department of Finance and Commerce, favoured the Committee with a copy of a

letter, dated 1st February, from Sir James Mackay at Pekin on the subject of t New Chinese Import Tariff prepared in London by Sir Alfred Bateman of th Board of Trade, and Mr. Alfred, on the basis of an effective five per cen *ad valorem.*

This letter stated that the proposal was to levy the following duties c cotton yarns imported into China :—

	H. K. Tael.	Mace.	Cand-areens.	Cash.
Cotton Yarn, Single, No. 14 and under, per picul	1	0	0	0
„ Over 14 and up to 24 „	1	2	5	0
„ Over 24	1	5	0	0
Doubled, trebled or fourfold „ two mace, five candareens over the above rates.				

On the other hand the Shanghai Branch of the China Association considere that the valuations on which the above duties were based were too high, and th were in favour of a duty of nine mace, five candareens per picul on cotton yarn grey or bleached, single or otherwise, and an *ad valorem* duty of five per cen on dyed, mercerised, or gassed yarns.

Sir James Mackay added that he had already transmitted the views of th Shanghai Branch of the China Association to His Majesty's Secretary of State fo Foreign Affairs ; but that he would be glad to receive any observations whic the Government of India might wish to offer.

The Government of India accordingly requested that the Association woul favour them with an expression of opinion.

On the 5th of April the Committee replied that they supported the principl of the recommendation made by the Shanghai Branch of the China Associatio in favour of a duty of nine mace, five candareens per picul on cotton yarns grey or bleached, single or otherwise, and an *ad valorem* duty of five per cen on dyed, mercerised, or gassed yarns.

It was added that since the bulk of the yarns imported into China from India were of lower counts and value than those from Japan and other countries the Committee considered that yarns from India ought to be assessed on the average value of such lower counts.

A month later (namely, 19th May 1902,) a telegram in the following term was received by the Association from the Government of India :—"Following received from Sir James Mackay, Shanghai : *Begins*—Your letter No. 2166, April 22. After considerable discussion London have proposed and China Associations here have agreed following rates for cotton yarns :—Single, No. 14 and under nine mace ; over No. 14 and up to No. 24, one tael ; over No. 24, one tael, two mace, five candareens; doubled, trebled and fourfold, two mace, five candareens over above rates. Will these rates be acceptable to you ? Please reply Monday. Discussion with Chinese takes place Tuesday. Mackay—*Ends.*—Pleas reply to-day if possible."

A special meeting of the Committee was therefore called at once and the following telegram was despatched on the same evening :—"Your telegram nine teenth instant, Millowners' Association, in special meeting, recommend consider

ation for Indian low count yarns, and suggest the basis of duty as under :—Cotton yarns, single, 10's and under, eight mace, three and one-third candareens ; over 10's and inclusive of 16's, nine mace; over 16's and inclusive of 24's, one tael ; over 24's, one-and-a-quarter taels ; doubled, trebled and fourfold, two mace, five candareens over above rates for single yarn."

In the month of September the Committee learned that the new Anglo-Chinese Treaty of Commerce had been promulgated, and application was made to the Government of India for a copy. But they were informed on the 3rd October that no copy of the Treaty had yet been received by the Government.

The text will, however, be found in the Appendices.

On the 5th September the Government of India forwarded to the Association a copy of a letter from Sir James Mackay to the effect that the duty had been fixed, with the approval of His Majesty's Government, at a uniform rate of nine and a half mace per picul for all yarns, grey or bleached, single or otherwise, except dyed, gassed or mercerised, which are to be dutiable at five per cent. *ad valorem*. The uniform rate of nine and a half mace per picul was pressed for strongly by the Chinese Representatives, who wished to avoid the inconvenience of being compelled to examine all shipments of yarn, and Sir James Mackay understood from the letter of the 22nd April (Finance and Commerce Department, No. 2166) that this duty would also meet the views of the Government of India. Appendix **(H)**.

COTTON DUTIES ACT, II OF 1896.

In April 1902 a member of the Association addressed the Committee calling attention to Section 6 of the above Act, under which duty at the rate of 3½ per cent. is levied on cotton goods produced in, and issued from, mill premises. The writers contended that on finished goods the duty pressed somewhat heavily, as the following illustration would show:—"Ordinary cloth, say of 39 × 36 × 9½ dimensions. The same cloth when finished turns up to 12 lbs. instead of 9½ lbs., which means 2½ lbs. gain in size and not in yarn. For this excess in weight of size the mill fetches about 2½ annas per piece at the rate of 1 pice per pound over and above the usual price per piece of ordinary cloth of 39 × 36 × 9½, the duty on finished goods being charged on the same scale as ordinary cloth; this additional weight, which is due only to size and not yarn, is assessed for duty according to tariff for ordinary cloth. The calculation when made shows the following result:—

39 × 36 × 9½ lbs. at 7 annas per lb. ordinary	... Rs.	4	2	6
39 × 36 × 12 lbs. at 7 „ when finished...	„	5	4	0

Duty as charged now per piece on Rs. 1-1-6

when instead of Rs. 1-1-6 it should have been charged on 2 annas 6 pies which the mill realizes on each piece "of finished goods as customary."

The matter received the careful consideration of the Committee, who recognised that a certain hardship did exist in the matter of the assessment of Excise Duty at 3½ per cent. upon the full weight of goods containing a large proportion of size. Having regard however to the difficulty of framing and specific suggestions for its removal, they did not think any useful purpose would be served by raising the question, and they accordingly replied in this sense to the Mill Company which had brought the matter to the notice of the Association.

THE EIGHTEENTH INDIAN NATIONAL CONGRESS.

The General Secretary to the Reception Committee in connection with the above Congress which held its sittings in Ahmedabad during the last week of 1902, addressed the Committee in regard to the Resolutions which were to be brought up for discussion, and called special attention to Resolution No. XV dealing with the Excise Duties in India. This resolution reads as follows :—

"That having regard to the fact that while the cloth manufactured by means of power looms in this country in no way competes with the piece-goods imported from Lancashire, the imposition of the Excise Duty of 3½ per cent. thereon continues to operate as a great injustice and hardship on the manufacturers apart from its tendency to arrest the free growth of the weaving industry. This Congress earnestly prays that the Government will be pleased to take the matter into its favourable consideration and repeal the duty at an early date."

As Mr. D. E. Wacha—a member of the general Committee of the Bombay Millowners' Association—was to attend the Congress, the Committee requested him to speak in support of the Resolution in question.

NEW MARKETS FOR BOMBAY COTTON GOODS.

(*See Association's Report for* 1901, *p.* 7.)

The efforts of the Committee to find new markets for the goods produced by the Weaving Mills in Bombay were continued without remission during the year. Many samples of goods which find a market in various parts of the world were obtained by the Association from the respective Consular Authorities, and the Committee understand that certain members of the Association who had followed up the guidance so obtained have done good business in markets which they had not previously touched.* Most of the samples received represented piece-goods, yarns and other cotton fabrics, and were forwarded by the British Consular Officers at Smyrna, Constantinople, Beirut, Nairobi, Mozambique, Quilimane, Berbera, and Beira. These samples were exhibited to members in the rooms of the Association on 22nd and 23rd May 1902, and the subsequent lots later in the year. In some cases, the more important samples were submitted to expert examination; and the technical specifications drawn up respecting them are at the service of members together with the goods to which they refer. Indeed, all the samples of cloth and yarn, received from the various Consulates, are still available to members, and may be inspected on application to the Secretary.

It may be mentioned that among the samples received from the Consul at Smyrna was a small quantity of opium, which was included in response to an enquiry as to the various commodities that might be exported by Turkey in return for Indian goods. But such importation was regarded by the Custom House officials as a contravention of the Opium Act, and it was consequently confiscated. Through the courtesy of the Collector, however, the sample was kept on view at the Custom House for a short time to enable members interested to inspect it, and was not disposed of in accordance with the Act until after a reference had been made to the Association.

* Through the activity of the Association and certain of its members, Indian yarns have recently assumed in the Turkish Market such importance as is considered by Mr. Waugh, H. M. Vice-Consul at Constantinople, to merit special attention. His annual report for the year 1902 has come to hand since this report was put into type, but at page 103 of the Appendices hereto will be found an extract bearing upon this matter.

It may be remembered that the Association has, for some time, been in correspondence with His Britannic Majesty's Consuls in Turkish ports with a view to opening up trade between these markets and Bombay.

The arrangements have so far advanced that some considerable business is already reported to have been done; but one of the difficulties encountered is that there continues to be a lack of correspondence between the vessels of various lines arriving in Port Said from Bombay and those vessels by which Bombay goods arriving at Port Said for transhipment would have to be taken on to Turkish ports. The Committee, in bringing this matter to the notice of the British Consul at Port Said, suggested, in a letter dated 1st July 1902, that he might perhaps communicate with the agents of some of the lines in question with a view to making arrangements for facilitating the direct transhipment and immediate forwarding of goods arriving from Bombay for transmission to the various Turkish ports.

EAST AFRICA.

With regard to opening up trade with East African ports in piece-goods—more particularly in Grey Shirtings and Sheetings—the Committee were favoured by the local Agents of the British India Steam Navigation Company, Ld., with rates of freight to the ports in question. These rates are as follows :—

(Rates of Freight on Piece-Goods and other Measurement Cargo.)

Lamoo	at	Rs.	25	0	0	per ton 40 c. ft.		
Mombasa, Kelinduni, Zanzibar	„	„	22	8	0	„		
Tanga	„	„	25	0	0	„	Including landing charges.	
Ibo	„	„	42	8	0	„		
Mozambique	„	„	35	0	0	„		
Beira, Delagoa Bay	„	„	40	0	0	„		
Durban (Natal) ...	„	„	40	0	0	„		

The following information was also supplied by the B. I. S. N. Company:—

"The Company now runs a monthly line of steamers direct to these ports,

"To enable Millowners to test the markets we are willing to take down a few bales of samples free, and trust advantage will be taken of this, as we, as well as yourselves, are anxious that this trade should be developed.

"Should you wish it, we will be glad to send samples to our Agents and invite their co-operation. If they do not wish to undertake the business themselves, we are sure they will be glad to recommend the firms of best standing at their respective ports who would do the business, and who might also send samples and advise generally as to their requirements."

The above information was in due course circulated to members of the Association.

CYPRUS.

It will doubtless be in the recollection of some members that a debate upon the development of Cyprus as an entrepôt of trade took place in the Parliamentary Committee of Supply on 26th May 1902, and that a statement was then made by the Colonial Secretary regarding the measures already initiated. These measures included the formation of an adequate port at Famagusta, a sheltered

point at the eastern end of the Island, and the immediate establishment of a weekly service of steamers between the existing ports and Egypt. It was, however, not stated whether the steamers in question would sail from Alexandria or from Port Said; but it seemed to the Committee that the advantages of bringing the said steamers and Cyprus into touch with Indian traders was, on all accounts, sufficiently obvious to be brought to the notice of Government. In addressing the Bombay Government, therefore, under date 10th September 1902, the Committee expressed the opinion that if the weekly steamers should sail from or touch at Port Said for the shipment of Indian merchandise, the prospects of that line and of Famagusta as an entrepôt would be benefited by the growth of a considerable commerce with India and the East. The Committee accordingly begged that His Excellency the Governor in Council would be so good as to communicate on the subject with the Government of India to the end that the Imperial Government might be moved to arrange that the weekly service of steamers to Cyprus should sail from or touch at Port Said for the shipment of Indian merchandise.

In the reply received under date 11th February 1903, the Bombay Government informed the Association that in the contract between the Government of Cyprus and Bell's Asia Minor Steam Ship Company, Ld., for a weekly steam service between the Island and Egypt, provision had been made for the weekly Mail steamer to sail from Port Said. Section 6 of this Contract, which Government were good enough to send to the Association for perusal, reads as follows :—

"The Mail steamer shall leave Port Said in every week as soon as practicable after the weekly Mail steamer from England arrives, and shall embark all Cyprus Mails (whether despatched from England or elsewhere) and deliver them at Larnaca or Limassol in accordance with the directions of the High Commissioner for the time being in force, and shall then proceed to and call at the other of the above-mentioned Island ports, and shall there disembark or embark any Mails which the Island Post-master or his Agents shall require to be disembarked or embarked. Subject as aforesaid the Time-tables in Schedule A shall be considered as part of the Contract, unless and until they shall be altered under the provisions of Clause 8."

The Time-table referred to reads as follows :—

(WINTER.)

Departure.		*Hour.*	*Arrival.*		*Hour.*
Port.	*Date.*		*Port.*	*Date.*	
Alexandria	*Tuesday* ...	*2-30 p.m.*	*Port Said*	*Wednesday.*	*6 a.m.*
Port Said *... ...	*Wednesday.*	*8 a.m.*	*Larnaca*	*Thursday* ...	*7 a.m.*
Larnaca	*Friday* ...	*11 a.m.*	*Limassol*	*Friday* ...	*3 p.m.*
Limassol	*Do.* ...	*8 p.m.*	*Port Said*	*Saturday* ...	*5 p.m.*
Port Said	*Saturday* ...	*9 p.m.*	*Alexandria*	*Sunday* ...	*12-30 p.m.*
(SUMMER, *whilst Government is resident at Troodos.*)					
Alexandria	*Tuesday* ...	*2-30 p.m.*	*Port Said*	*Wednesday.*	*6 a.m.*
Port Said *... ...	*Wednesday.*	*8 a.m.*	*Limassol*	*Thursday* ...	*5 a.m.*
Limassol	*Thursday* ...	*9 a.m.*	*Larnaca*	*Do.* ...	*1 p.m.*
Larnaca	*Friday* ...	*11 a.m.*	*Limassol*	*Friday* ...	*3 p.m.*
Limassol	*Do.* ...	*8 p.m.*	*Port Said*	*Saturday* ...	*5 p.m.*
Port Said	*Saturday* ...	*9 p.m.*	*Alexandria*	*Sunday* ...	*12-30 p.m.*

* *"The Mail steamer will leave Port Said as soon as practicable after the Weekly Mail Service from England arrives, and shall be due at Larnaca and Limassol, respectively, 23 and 21 hours after leaving Port Said. Whenever the steamer shall call at Papho on her passage between Limassol and Port Said, the arrival at Port Said shall be 6 a.m. on Sunday and at Alexandria 6 a.m. on Monday."*

The Committee, in thanking Government for the above information, expressed hope that through Cyprus Bombay spinners and weavers might be able in time to considerable business with Asia Minor and Syria. The Committee addressed High Commissioner of Cyprus on 14th February 1903 in regard to this matter, id desired to be furnished with the names of one or two respectable firms there with whom members of the Association might open communication. The sense of the reply, when received, will be communicated to members.

SHUTTLE GUARDS.

The Committee corresponded during the year with the Chief Inspector of Factories with regard to the adoption of shuttle guards in the Weaving Mills in Bombay. The Chief Inspector, in addressing the Association on 7th November 1902, pointed out that a large number of accidents had been caused by flying shuttles, and he asked for the opinion of the Association as to the particular class of guard that should be used. The fixed bar, he considered, was the most efficacious, and he would be in favour of this pattern, but it was believed that it interfered with the weaver when the latter wished to draw warp threads through the reed. If the Committee considered the fixed bar would diminish the output of the looms, the Collector said he was prepared to order the application of moveable automatic slay guards; but he pointed out that these were more expensive than the fixed guards, and further that work-people were certain to keep them turned up and tied up unless they were carefully watched, and that if they were adopted, the responsibility for their proper use would be thrown on the Mill-owners. The Committee, before replying definitely to the Collector, addressed a circular letter to the Agents and Owners of Weaving Mills calling attention to the Collector's suggestions, and inviting opinion as to the suitability of either of the guards mentioned by the Collector or any other pattern, which would be effective without in any way pre[illegible] On receipt of the various replies a [illegible]e matter—consisting of Messrs. W. H. [illegible]rsey, and C. N. Wadia—and the result [illegible] communicated to the Collector. In [illegible] 1903, the General Committee stated [illegible]e accidents from flying shuttles could be [illegible]d for the adoption of appliances which [illegible]ut of many looms and to that extent injure [illegible] Accidents, it was added, did, however, occur [illegible]mmittee recognised that it fell within the [illegible]r protection was necessary. They therefore [illegible]me form of shuttle guard was desirable. The [illegible]ider that Government should seek to prescribe [illegible]uld be sufficient if the authorities reserved [illegible]tern that was demonstrably inefficient. The [illegible] fixed guards were entirely out of the [illegible]ng that they very greatly impeded the [illegible]ion, would rather incur the extra expense of [illegible]us reduction of their output; but, of course, [illegible] the cheap fixed guard, there ought, in the [illegible] be no objection on the part of the Government.

There were many patterns of automatic shuttle guard in enistence : some of t
had already been received in Bombay, and a variety of other kinds were expe
shortly. The Committee stated that as soon as they had been fixed and test
the Collector would be informed of the result. It would then be possible
decide, from actual demonstration, whether any of the various patterns wer
inefficient and to make a list, to be added to from time to time, of those descrip-
tions of shuttle guard which are recognised by Government. Pending the conduct
of these experiments, for which the material did not at present exist in Bombay,
the Committee hoped that the Collector would not press for the precipitate
adoption of guards which might be found by experience to be in no way suitable.

The Chief Inspector of Factories, in his reply dated 28th January 1903,
stated that he had no objection to the course proposed by the Association, and was
prepared to postpone, for the time being, the issue of orders on the subject.
(*Appendix* **I.**)

INFANT MORTALITY.

The Executive Health Officer of the Bombay Municipality called the
attention of the Corporation during the year to the high infant mortality prevalent
in the City and to the measures and remedies he considered necessary to reduce
the same. The Health Officer drew special attention (1) to the mischief caused
by the return of female labourers to work in mills and factories within a short
period of confinement, and (2) to the evil influences of insanitary and over-
crowded quarters. With regard to the first matter, the Health Officer suggested
the adoption, in Bombay, of a measure which had proved of much benefit in some
European towns, *viz.*, the provision in the mill or workshop of a room of nur-
[illegible] might leave their infants in charge of some responsible in-
sery where mothe[illegible]ss to them at reasonable times during the hours of work
dividual and have acce[illegible] Association to giv
The Committee were asked to move
favourable consideration to the matter
whether Millowners would be willing
tions and thus render unnecessary any
in view. It was also requested that a re
number of female mill-labourers at work
their average attendance in the previous t
labourers in employ between the ages of 15
the ages of one month and three years.
Association was invited to consider whether it
owners to take steps for the provision of sanit

The Committee, on receipt of these
with a view of obtaining the particulars ask
shows the position of the matter :—

AVERAGE PER

Number of females between 15 and 40.	Number with infants between 1 month and 3 years.	Ratio to Total.
330	17	% 5·181

In communicating the above figures to the Municipality the Committee expressed their regret that they had been unable to obtain fuller particulars, but they expressed the hope that the information supplied would be of use in the solution of an extremely difficult question. They further added that the various proposals of the Health Officer had had the careful consideration of the Committee, and that while they could not see their way to do anything in respect of nurseries for infants, they had in fact in recent years made repeated efforts to come to an arrangement with the Bombay Improvement Trust for the erection of sanitary quarters for mill hands, and that the Committee still awaited the decision of that body as to the specific proposals submitted to them.

PROGRESS OF THE MILL INDUSTRY.

The following figures are taken from the annual statement published by the Association, and show, for the last ten years, the position of the mill industry in India on 30th June, also Bombay's share in that industry, and the increase or decline, as the case may be, in the number of spindles and looms, respectively :—

ALL INDIA.

Years ending 30th June.	Number of Mills.	Number of Spindles.	Number of Looms.	Average No. of Hands employed daily.	Approximate Quantity of Cotton consumed.	
					Cwts.	Bales of 392 lbs.
1893...	141	35,75,917	28,164	1,21,500	40,98,528	11,71,008
1894...	142	36,49,786	31,154	1,30,461	42,78,778	12,22,508
1895 ..	148	38,09,929	35,338	1,38,669	46,95,999	13,41,714
1896...	155	39,32,946	37,270	1,45,432	49,32,613	14,09,318
1897...	173	40,65,618	37,584	1,44,335	45,53,276	13,00,936
1898...	185	42,59,720	38,013	1,48,964	51 84,648	14,81,328
1899...	188	47,28,383	39,069	1,62,108	58.63,165	16,75,190
1900...	193	49,45,783	40,124	1,61,189	50,86,732	14,53,352
1901...	193	50,06,936	41,180	1,72,883	47,31,090	13,51,740
1902...	192	50,06,965	42,584	1,81,031	61,77,633	17,65,038

BOMBAY ISLAND.

Years ending 30th June.	Number of Mills.	Number of Spindles.	Number of Looms.	Average No. of Hands employed daily.	Approximate Quantity of Cotton consumed.	
					Cwts.	Bales of 392 lbs.
1893...	69	20,41,208	16,664	67,870	25,34,910	7,24,260
1894...	69	20,37,374	18,265	70,553	25,57,296	7,30,656
1895...	69	21,23,892	20,217	75,740	28,53,879	8,15,394
1896...	71	21,86,323	21,335	78,455	29,73,873	8,49,678
1897...	75	21,87,425	21,287	69,530	24,59,646	7,02,756
1898...	82	22,26,982	21,379	70,728	28,60,648	8,17,328
1899 ..	82	24,10,801	22,209	77,169	33,27,800	9,50,800
1900...	82	25,36,891	22,215	72,914	26,06,800	7,44,800
1901...	81	25,71,092	22,414	82,162	24,35,153	6,95,758
1902...	80	25,23,769	22,845	86,122	34,55,823	9,87,378

It will be seen that the number of mills throughout India has been reduced by one, and that the mill that has disappeared from the list was situated in Bombay. The aggregate spindle power for all India remains virtually unchanged; but since there is a falling off of no less than 47,323 spindles in Bombay itself, it is evident that there has been construction elsewhere. The total of looms for all India shows an increase of 1,404 in the year; but to this Bombay Island has contributed only 429. It would therefore appear that she is not keeping pace with the rest of the country in this respect. With so large a decline in the

number of spindles, and with so slight an increase in the number of looms, there was still an addition of nearly four thousand, or about 4·8 per cent., to Bombay's average number of hands employed, while the rest of India showed an increase of 4·6 per cent. With these almost identical rates of increase we have to contrast a rise of some 42 per cent. in Bombay's consumption of cotton as against an increase of only 19 per cent. in the mill consumption of other parts of India. The "Consumption of Cotton" is based on the returns made by the individual mills; and it is impossible to avoid doubting their accuracy in some measure. If we calculate for the Island of Bombay and the year 1901 the number of hundredweights of cotton consumed and yarn produced in relation to the average number of hands employed, we find that each hand dealt with 29·64 cwts. of cotton per annum, and produced only 20·63 cwts. of yarn, whereas the same calculation made for the year 1902 would indicate that each hand had dealt with 40·13 cwts. of cotton while producing only 34·7 cwts. of yarn. Even allowing for the greater activity of the industry in the latter year, this seems improbable, and especially so when we find that similar calculations made for the rest of India and for the same two years show each hand to have dealt with 25·31 cwts. in 1901 and 28·68 cwts. in 1902. As a matter of fact there has long been reason to doubt whether mill agents employ due care in making up their returns of consumption. The Secretary of the Association has shown that in the ten years—1892-93 to 1901-02—there has been an annual average discrepancy of some 36 per cent. between the cotton crop as estimated in the Blue-book *Area and Yield* on the one hand and the total of Exports and Mill Consumption on the other. It is worth while to give the figures below. It will be noted that the crop estimate from *Area and Yield*, given in the first column, is stated in bales of 400 lbs., and is for the official years ending 30th April. The Exports, being taken from the *Trade and Navigation Returns*, are also for the official years, but are stated in hundredweights. The Mill Consumption is for the "season year" ending 30th June, and is stated in bales of 392 lbs. or 3½ cwts. Such differences as might have appeared between each single year ending 30th April and each single year ending 30th June are neutralised for statistical purposes by taking the average over so long a period as ten years.

DISCREPANCY IN COTTON STATISTICS.

ALL INDIA.

Years.	Yield. (Official year) Bales of 400 lbs.	Export. (Official year) Cwt.	Mill Consumption. (Year ending 30th June) Bales of 392 lbs.
1892-93	19,23,904	47,89,201	11,71,008
1893-94	21,80,499	47,88,888	12,22,508
1894-95	19,57,251	33,84,697	13,41,714
1895-96	23,64,319	52,48,428	14,09,318
1896-97	19,29,191	52,16,023	13,00,936
1897-98	21,97,933	37,22,526	14,81,328
1898-99	24,24,613	54,11,012½	16,75,190
1899-1900...	8,42,975	43,73,470	14,53,352
1900-01	23,08,936	35,75,703	13,51,740
1901-02	19,69,238	57,00,014	17,65,038
	2,00,98,859	4,62,00,962	1,41,72,192
	or Bales...	1,32,02,846	1,32,02,846
		Total Export and Mill Consumption Bales...	2,73,75,038
		Deduct—Yield	2,00,98,859
		Ten years' excess of alleged consumption over production ...	72,76,179

It will probably be felt that an annual discrepancy of upwards of 7¼ lakhs of bales is greater than can be accounted for by mere error in the estimate of the crop together with such consumption of cotton as relates to hand industries.

Comparison of Cotton Consumption with Yarn Production.

This may be further tested by a comparison of cotton consumption with yarn production as returned by Millowners and by Government, respectively. In the following table the consumption of cotton is taken, as before, from the returns of individual mills. The production of yarn is taken from the Blue-book entitled *Financial and Commercial Statistics*, and these figures are reduced from pounds to hundredweights for purposes of comparison. The Production Statistics are available only in respect of the last seven years since the passing of the Cotton Duties Act. The Consumption Statistics, as already stated, are for the season year ending 30th June. The Production Statistics are for the official year ending 30th April. For this reason it is expedient to deal only with the averages relating to the seven years' period. The conversion of cotton into yarn involves a loss of weight through wastage of cotton. This loss is supposed to be equal to about 16% on the whole weight of cotton, and a deduction of that amount is made on the average consumption in order to ascertain what weight of yarn might have been expected from the quantity of cotton returned as used in the Indian mills. The production of yarn in the Hyderabad Assigned Districts, Indore, Mysore, Baroda, Nandgaon and Bhavnagar have been included in the figures; and still it will be seen that the alleged mill consumption of cotton ought to have given each year some 2,12,399 cwts. more of yarn than was actually produced. Restoring to this quantity the 16 per cent. of cotton already deducted, there are 2,46,483 cwts. of cotton unaccounted for, this quantity being equal to 70,424 bales of 392lbs. There is, of course, a great discrepancy between the difference of 7¼ lakhs found by the first method and that of 70,424 found by the second; but either is excessive, and tends to show that the returns furnished by Millowners in this regard are of only moderate value.

COMPARISON OF COTTON CONSUMPTION AND YARN PRODUCTION. SEVEN YEARS—1895-6 to 1901.

ALL INDIA.

Twelve months' periods ending in—	Cotton Consumption. Cwts.	Yarn Production. Cwts.
1896	49,32,613	38,60,287
1897	45,53,276	37,78,436
1898	51,84,648	41,30,320
1899	58,63,165	45,74,867
1900	50,86,782	45,87,708
1901	47,31,090	31,51,563
1902	61,77,633	51,15,519
Total of seven years... Cwts.	3,65,29,157	Total of seven years...Cwts. 2,91,08,700
Annual average ... „	52,18,451	Annual average ... „ 41,71,100
Deduct—16% wastage... „	8,34,952	Difference ... ... „ 2,12,399
Cwts,	43,83,499	Cwts. 43,83,499

The following is an examination of the same question so far as relates to the Island of Bombay alone. Unfortunately the figures giving the production of yarn in Bombay alone in the year ending.30th June 1900 are not obtainable. The corresponding figures in the other columns are therefore ignored and an average struck on the five years that remain :—

BOMBAY ISLAND.

Year ending 30th June.	Hands Employed.	Yarn Produced. Cwt.	Cotton.		
			Mill Consumption. Cwt.	Exports. Cwt.	Arrivals. Cwt.
1897	69,530	21,75,000	24,59,646	35,28,437	56,45,113
1898	70,728	23,08,036	28,60,648	29,17,068	60,55,890
1899	77,169	26,59,821	33,27,800	38,43,423	71,16,133
1900	.....	.....	.....	.....	.....
1901	82,162	16,95,490	24,35,153	33,60,875	66,38,588
1902	86,122	29,88,619	34,55,823	44,01,071	74,98,708
Total	3,85,711	1,18,26,966	1,45,39,070	1,80,50,874	3,29,54,432
5 years' average	77,142	23,65,393	29,07,814	36,10,175	65,90,886

Taking the average mill consumption as returned, *i.e.*, 29,07,814 cwts., and deducting therefrom 4,65,250 (being sixteen per cent. loss of weight by wastage) we find that the weight of yarn to be expected from the alleged consumption in Bombay Island was 24,42,564 cwts., whereas only 23,65,393 cwts. were actually produced. The difference here is one of only 77,171 cwts., so that if the returns of cotton consumption are correct the loss by wastage is more nearly 18 than 16 per cent.

From the foregoing table it might appear that the sum of Mill Consumption and Exports fell short of total arrivals by some 73,000 cwts. per annum. This, however, is purely fortuitous, and arises from the elimination of the figures for 1900. In that year the combined Exports and Mill Consumption exceeded the arrivals by 11,13,803 cwts., so that over the complete six years' period the combined Exports and Mill Consumption really show an average annual excess of 1,49,863 cwts. over arrivals. This is equivalent to some 42,800 bales, which must be compared with the discrepancy of 1,24,754 bales found in the foregoing paragraph. Most unfortunately the loss of the figures representing the yarn production for 1900 bars any profitable analysis of a more searching kind.

SHIPMENTS OF YARN.

In the year under review there was a slight further recovery in the shipments of country-made yarns ; and, in spite of the great difficulties attending monetary relations with the Chinese markets, the despatches to that country amounted to 5,55,487 bales. There was thus an increase of 19,292 bales, or 3·59 per cent. as compared with 1901; but the figure so attained still fell short by some 24,000 bales of that of the record year 1899. It must, moreover, be borne in mind that the exports of yarn to Japan, which in 1899 were still represented by some 250 bales, are now extinct ; so that the total exports to the Further East fell short by some 4·2 per cent. of those made in that bumper year.

Exports of Country-made Yarn from Bombay to China and Japan.

PERIOD.	To China (Bales, 400 lbs. each).	To Japan (Bales, 400 lbs. each).	Total Bales.
From 1st January to 31st December 1877	28,516	142	28,658
Do. do. 1878	45,933	1,745	47,678
Do. do. 1879	45,530	4,842	50,372
Do. do. 1880	63,194	4,527	67,721
Do. do. 1881	61,783	7,378	69,161
Do. do. 1882	81,434	9,854	91,288
Do. do. 1883	94,982	17,421	1,12,403
Do. do. 1884	1,27,318	13,846	1,41,164
Do. do. 1885	1,54,517	19,020	1,73,537
Do. do. 1886	1,99,407	20,543	2,19,950
Do. do. 1887	2,05,158	39,730	2,44,888
Do. do. 1888	2,34,071	52,697	2,86,768
Do. do. 1889	2,54,697	62,220	3,16,917
Do. do. 1890	3,25,060	37,722	3,62,782
Do. do. 1891	3,65,038	10,939	3,75,977
Do. do. 1892	3,85,771	21,445	4,07,216
Do. do. 1893	2,97,572	14,198	3,11,770
Do. do. 1894	3,38,703	10,743	3,49,446
Do. do. 1895	3,74,119	2,515	3,76,634
Do. do. 1896	4,71,023	2,467	4,73,490
Do. do. 1897	3,61,221	645	3,61,866
Do. do. 1898	4,37,645	475	4,38,120
Do. do. 1899	5,79,619	250	5,79,869
Do. do. 1900	2,53,331	100	2,53,431
Do. do. 1901	5,36,195	.....	5,36,195
Do. do. 1902	5,55,487	.....	5,55,487

In country-made piece-goods the shipments have shown an even slighter improvement (1·9 per cent.) on those of 1901 ; and even with this improvement the trade was only about 41·5 per cent. of that recorded in 1900 and slightly over 14 per cent. of that done in 1899.

Exports of Country-made Piece-goods from Bombay to China and Japan.

PERIOD.	China.		Japan.		Total.	
	Packages.	Yards.	Packages.	Yards.	Packages.	Yards.
From 1st Jan. to 31st Dec. 1877...	10	14,400	...	.....	10	14,400
Do do. 1878...	1,206	14,99,334	58	1,13,528	1,264	16,12,862
Do. do. 1879...	296	3,65,640	5	8,400	301	3,74,040
Do. do 1880...	1,553	18,90,685	110	1,32,000	1,668	20,22,685
Do. do 1881...	144	1,68,139	2	5,250	146	1,73,389
Do. do. 1882...	573	7,13,287	20	36,714	593	7,49,951
Do. do. 1883...	1,875	21,88,770	452	5,65,953	2,237	27,54,723
Do. do 1884...	1,595	17,70,662	16	25,187	1,611	17,95,849
Do. do. 1885...	2,303	37,12,273	6	5,376	2,309	37,17,649
Do. do. 1886...	2,302	29,88,890	...	.....	2,302	23,88,890
Do. do. 1887...	1,963	25,64,680	3	4,560	1,966	25,89,240
Do. do. 1888...	11,320	1,57,51,688	96	1,40,321	11,416	1,58,92,009
Do. do. 1889...	1,302	19,[illegible]997	26	31,200	1,328	20,17,197
Do. do. 1890...	3,148	36,[illegible],574	21	23,800	3,169	36.84,374
Do. do. 1891...	4,564	61,02,250	...	.....	4,564	61,02,250
Do. do. 1892 ..	7,416	99,84,335	...	.....	7,416	99,84,335
Do. do. 1893...	3,598	45,17,445	38	57,312	3,636	45,74,757
Do. do. 1894...	4,949	60,68,702	...	.....	4,949	60,68,702
Do. do. 1895...	7,744	1,00,64,441	7	7,200	7,751	1,00,71,641
Do. do. 1896...	7,024	86,38,535	26	30,420	7,050	86,68,955
Do. do. 1897...	2,368	30,36,875	15	21,988	2,383	30,58,863
Do. do. 1898...	947	13,18,478	...	.....	947	13,18,478
Do. do. 1899...	3,034	39,93,348	1	1,680	3,035	39,95,028
Do. do. 1900...	1,080	13,72,980	...	.....	1,080	13,72,980
Do. do. 1901...	418	5,59,100	...	.....	418	5,59,100
Do. do. 1902 ..	501	5,69,758	...	.....	501	5,69,758

The prime causes of the meagre results of the trade with China in 1902 are scarcely open to doubt. The comparative bareness of the China market during a great part of the year and the relative absence of political disturbance would, in all probability, have produced a very considerable demand for Indian goods. But the following tables, now for the first time introduced to show (*a*) the price of silver and the level of China Exchange on the 31st March of each year since 1894, and (*b*) the price of silver and the level of China Exchange on the last day of each month in 1902, will leave little doubt as to the difficulties that have attended any legitimate forward business :—

SILVER AND THE CHINA EXCHANGES SINCE 1894.

Rates of 31*st March in each year.*

	Price of Silver. Per 100 Tolas.	Exchange on Hongkong.
	Rs. a.	Rs.
1894	84 $11\frac{7}{15}$	$175\frac{1}{32}$
1895	91 12	$188\frac{11}{26}$
1896	92 $9\frac{1}{17}$	$186\frac{6}{13}$
1897	83 $9\frac{1}{3}$	$163\frac{39}{100}$
1898	71 3	$141\frac{1}{4}$
1899	73 $15\frac{15}{23}$	$149\frac{3}{25}$
1900	73 $3\frac{4}{5}$	$147\frac{4}{13}$
1901	75 $4\frac{8}{23}$	$151\frac{17}{30}$
1902	67 8	$138\frac{3}{4}$
1903	58 8 *	119 *

* Approximate.

(SILVER AND THE CHINA EXCHANGE IN 1902.)

Rates of last day in each month up to 31*st January* 1903.

—	Price of Bar Silver in Bombay.	China Exchange.	
		Hongkong per 100 Dollars.	Shanghai per 100 Taels.
	Rs. a. p.	Rs. a. p.	Rs. a. p.
1902.			
28th February	64 8 0	134 0 0	133 0 0
27th March*	63 10 0	131 0 0	178 0 0
25th April	61 8 0	125 8 0	170 0 0
29th May	61 4 0	127 0 0	170 0 0
27th June	62 10 0	128 8 0	170 0 0
25th July	64 0 0	129 0 0	172 0 0
29th August	61 14 0	129 8 0	172 0 0
26th September	60 6 0	127 0 0	170 0 0
30th October	59 10 0	125 0 0	169 0 0
28th November	54 8 0	114 0 0	160 0 0
30th December	56 10 0	117 8 0	162 8 0
1903.			
30th January	55 8 0	115 0 0	158 8 0

The uncertainty as to the projected Currency Legislation of the Philippines and the Straits Settlements is understood to have contributed to the decline marked in the foregoing tables; and at the moment of going to press the reality of this influence is made clear by the sharp recovery of silver on the report of heavy purchases of the metal commenced by the United States for the Philippines. Whether any such rise can be more than temporary is a very serious question for all shippers to China; and there would appear to be among them a growing recognition that the thing to be most desired is stability of exchange at one level or another. So long as silver maintained such a position as to warrant even a tentative reconsideration of India's Currency Legislation, it was to the interests of the China shippers to demand such reconsideration and to create or keep alive such uncertainty concerning the permanency of that policy as might conceivably retard the fall in the Eastern Exchanges, and admit of continued business even on the precarious footing of the past year. But should it be felt that the decline of silver has now reached such a point that it is no longer practicable for India to go back upon her present policy, it might be argued that the sooner the true position of silver is allowed to define itself, and the sooner the China Exchange reaches its absolute level, the sooner will it be possible for a shipper to estimate what he is likely to receive for his goods.

The shipments from the United Kingdom of Yarns and of Piece-goods for China and Japan respectively show some striking changes. The most marked is, as might be expected, the decline in Yarns for Japan. In 1901 the United Kingdom supplied Japan with 74,85,900 lbs. of Yarn; but in 1902 her shipments amounted to only 23,65,900, showing the enormous decline of 51,20,000 or 68·6 per cent. It is interesting, as throwing some light on the respective positions of the cotton industry in that country and in India, to compare with these figures those for the importation of foreign yarns into the chief presidency towns, which will be found among the Appendices to this Report.

There was also a decline in China's imports of British Yarns; but here the falling off was only from 69,38,200 lbs. to 63,97,800 lbs., or some 7·7 per cent.

On the other hand, British Piece-goods were shipped in larger quantities both to China and to Japan. China took 57,47,73,000 yds. against 49,10,72,700 in the previous year; and Japan took 10,91,16,400 yds. as compared with 63,321,400. The increase in respect of China was thus one of 8,37,00,300 yds., or about 17 per cent., while that of Japan, though amounting to only 4,57,95,000 yds., represented a percentage increase of some 72·3 per cent.

Britain's trade with the Further East therefore showed an aggregate gain of 12 94,95,300 yds. equal to 23·35 per cent., in Piece-goods and a net decrease

of 56,60,400 lbs., equal to 39·24 per cent., in Yarns. The retrospect back to 1877 is shown in the following table :—

Shipments of Cotton Piece-goods and Yarns from the United Kingdom to China and Japan from the year 1877 *to* 1902.

YEARS.	PIECE-GOODS OF ALL KINDS.			YARNS.		
	To China (including Hongkong).	To Japan.	Total.	To China (including Hongkong).	To Japan.	Total.
(1st Jan. to 31st Dec.)	Yards.	Yards.	Yards.	Lbs.	Lbs.	Lbs.
1877...	36,73,29,900	2,71,50,300	39,44,80,200	1,79,62,200	1,51,05,700	3,30,67,900
1878...	34,00,97,800	4,22,32,400	38,23,30,200	1,10,58,200	2,54,09,600	3,64,67,800
1879...	46,23,03,800	6,16,17,500	52,39,21,300	1,43,43,400	2,46,07,700	3,89,51,100
1880...	44,72,71,900	6,14,64,500	50,87,36,400	1,95,14,200	2,69,11,600	4,64,25,800
1881...	52,38,52,300	6,33,25,100	58,71,77,400	1,91,49,400	2,83,29,800	4,74,79,200
1882...	40,19,58,300	5,29,90,500	45,49,48,800	1,52,26,700	1,91,44,200	3,43,70,900
1883...	37,06,59,200	4,50,06,000	41,56,65,800	1,33,70,700	2,01,48,500	3,35,19,200
1884...	39,45,83,600	4,58,54,200	43,99,37,800	1,57,24,300	2,31,34,800	3,88,56,100
1885...	52,39,27,000	4,54,12,400	56,93,39,400	2,03,73,900	1,26,87,200	3,30,61,100
1886...	45,58,23,000	3,46,28,500	49,04,51,500	1,05,98,200	1,63,32,200	2,69,30,400
1887...	55,27,42,700	6,54,03,800	61,81,46,500	1,18,82,200	2,34,72,500	3,53,54,700
1888...	57,45,47,500	7,78,56,400	65,24,03,900	1,74,74,000	2,71,68,600	4,46,42,600
1889...	47,44,26,100	8,25,78,000	55,70,04,100	88,28,900	2,68,32,600	3,56,61,500
1890...	57,02,97,800	6,33,09,400	63,36,07,200	1,49,56,900	2,31,00,500	3,80,57,400
1891...	53,41,29,400	6,11,20,100	59,52,49,500	1,31,44,800	1,48,26,500	2,79,71,300
1892...	49,74,85,200	7,51,80,500	57,26,65,700	85,01,300	2,33,84,900	3,18,86,200
1893...	36,54,25,500	6,83,07,800	43,37,33,300	87,78,500	1,89,63,000	2,77,41,500
1894...	42,53,40,200	7,16,03,900	49,69,44,100	97,69,500	1,46,38,800	2,44,08,300
1895...	52,81,87,300	9,90,35,600	62,72,22,900	1,12,26,100	2,12,66,000	3,24,92,100
1896...	54,29,93,400	10,55,07,100	64,85,00,500	90,76,400	2,27,87,400	3,18,63,800
1897...	44,51,82,100	94,056,700	53,92,38,800	1,12,46,000	2,31,42,600	3,43,88,600
1898...	48,64,96,200	10,49,66,000	59,14,62,200	1,31,09,700	1,71,91,500	3,03,01,200
1899...	55,40,80,000	9,38,50,600	64,79,30,600	1,13,44,700	1,25,26,500	2,38,71,200
1900...	45,61,95,300	11,94,70,200	57,56,65,500	22,69,700	1,12,78,800	1,35,48,500
1901...	49,10,72,700	6,33,21,400	55,43,94,100	69,38,200	74,85,900	1,44,24,100
1902...	57,47,73,000	10,91,16,400	68,38,89,400	63,97,800	23,65,900	87,63,700
Average for 10 years	48,69,74,570	9,29,23,570	57,98,98,140	90,15,660	1,51,64,640	2,41,80,300

SIR JAMSETJI JEEJEEBHOY HOSPITAL.

Appeal for Funds.

The Honorary Secretary and Treasurer of the Sir J. J. Hospital All Saints' Nursing Fund brought to the notice of the Committee, in June 1902, the pressing need of subscriptions to the Funds of the above Hospital. It was pointed out that many accident cases among the work-people from mills were constantly brought to the Hospital for treatment, and, as money was required very urgently to keep the nursing staff in an adequate state to meet all the demands made upon it, it was suggested that the Association might fittingly grant assistance. The subjoined particulars, supplied by Lieut.-Col. W. K. Hatch, F.R.C.S., Senior Medical Officer, J. J. Hospital, were submitted at the same time with a view to strengthening the appeal made by the Hon. Secretary on behalf of the Nursing Establishment :—

Average number of in and out-patients, daily	460
Total number of in-patients in a year	6,900
„ „ out-patients „	39,000
Operations on in-patients, yearly	2,000
„ „ out-patients, „	3,000

Nurses are required for wards and for the operating room. The night nursing cannot be done properly at present. Double the present number of Nurses are urgently needed.

Government allows Rs. 510 a month for Nurses, and about Rs. 550 are granted from the Lady Reay Fund. In consideration of the many mill-hands, railway servants, and lascars that attend the Hospital for treatment daily, an

appeal is now made to Millowners and others who employ a large number of natives for a yearly subscription which will relieve the present strain on the Nursing Funds, and make it possible to increase the staff and provide accommodation for more nurses.

Mill-hands treated yearly :—

In-patients	390
Out-patients	4,530

The matter received the careful consideration of the Committee, but as they were in doubt whether the constitution of the Association would admit of a grant being made from its funds either by a resolution of the Committee or by a resolution of the members of the Association in general meeting, the Committee submitted the matter to the Solicitors of the Association for their opinion. The reply received was to the effect that the Committee had no power to apply the funds of the Association for the purpose in question, but that it was quite within the power of the Association in general meeting assembled, by resolution duly passed, to apply the funds of the Association to this or any other purposes. It was added that the Bombay Millowners' Association not being a joint-stock company governed by the Indian Companies Act, could, at any time, alter or rescind its rules and regulations by the passing of a resolution.

In view of the above opinion, the Committee decided to recommend to the members at the forthcoming annual general meeting that a donation be voted, and this Resolution was in due course communicated to the Hon. Secretary and Treasurer of the Sir J. J. Hospital All Saints' Nursing Fund.

The following article, reprinted from the *Times of India* of the 8th April 1903, describes the present position and the effort that is being made to remedy it :—

For many years the nursing arrangements in the Bombay native hospitals have been so seriously deficient as to constitute a grave blot upon the administration of gratuitous medical relief in the City. The root of the mischief has been the old one in this Presidency—the lack of funds. The necessary money was not forthcoming, and as a consequence the hospital authorities have had to muddle along, the Doctors carrying on their work as best they could without the assistance of that adequate and trained nursing staff which is more necessary in this country than in Europe. From time to time attempts have been made to improve this state of affairs. During her residence in Western India, Lady Reay raised a handsome fund, the interest upon which went towards the better nursing of the Jamsetjee Jeejeebhoy, the Bai Motlibai, and the Petit Hospitals. In November of last year the Government largely increased their grant to the J. J. Hospital, but when every source of income is taken into account, and the funds are almost parsimoniously expended, the nursing staff is grossly inadequate. In the J. J. Hospital twelve of the twenty-four wards are totally unnursed, and the Eye Hospital is altogether without Nurses. When these circumstances came to the knowledge of Mrs. W. H. Crowe, a few months ago, she set herself energetically to work to effect a permanent improvement. Mr. Crowe joined actively in the task, and by means of a systematic canvas of the community, Mr. and Mrs. Crowe have raised over a lakh of rupees, which will be invested and form a solid and most valuable endowment to the Fund. With the interest from this Fund, and the guarantee of an equal amount which has been made by Government, the needs of the J. J. Hospital will be very largely met. If an additional two thousand rupees a year can be met from private sources, the nursing of the hospital will be put upon a satisfactory basis, and then, as the result of Mr. and Mrs. Crowe's benevolent activity, a grave reproach upon the hospital administration of Bombay will be removed.

At the request of Government Lieutenant-Colonel Dimmock, I.M.S., Senior Medical Officer of the J. J. Hospital, has taken steps to form a Committee, in whom the management of the Nursing Fund shall be vested. A meeting of the gentlemen provisionally selected was held at the High Court on Monday evening (6th April 1903), when there were present the Honorable Mr. Justice Crowe, the Honorable Mr. Justice Chandavarkar, Sir Jamsetjee Jeejeebhoy, Sir Dinshaw Petit, Mr. Vijbhukandas Atmaram, Mr. N. M. Wadia, C.I.E., Lieutenant-Colonel Dimmock, I.M.S., Major Quicke, I.M.S., and the Honorary Secretary and Treasurer, Mr. H. Stanley Reed.

On the motion of Mr. Chandavarkar, seconded by Mr. Vijbhukandas Atmaram, Mr. Crowe was unanimously elected Chairman.

Lieutenant-Colonel Dimmock having explained the objects for which Government desired him to form a Committee, it was unanimously agreed that the names of the following gentlemen be recommended to Government with a view to their formal constitution into a Committee to administer the Nursing Fund :—The Honorable Mr. Justice Crowe, the Honorable Mr. Justice Chandavarkar, Sir Jamsetjee Jeejeebhoy, Sir Dinshaw Petit, Mr. Fazulbhoy Visram, C.I.E., Mr. N. M. Wadia, C.I.E., Mr. Vijbhukandas Atmaram, Mr. Sassoon J. David, Mr. Rustom P. Taleyarkhan, Lieutenant-Colonel Dimmock, I.M.S. (Principal Medical Officer, J. J. Hospital), Major Childe, I.M.S. (Senior Physician, J. J. Hospital), and Major Quicke, I.M.S. (Senior Surgeon, J. J. Hospital).

The Chairman announced that a brief statement of the financial position of the Fund had been drawn up by the Honorary Secretary. This showed that the present income of the Sir J. J. Hospital Nursing Fund is derived from several sources. Government make a monthly grant of Rs. 500 towards the J. J. Hospital and of Rs. 416-10-8 to the Motlibai and Petit Hospitals. A monthly income of about Rs. 400 is drawn from the interest of a fund raised several years ago by Lady Reay for the better nursing of the hospital, and a monthly subscription of Rs. 40 is given by a gentleman, who prefers to remain anonymous, towards the Parsee Ward. These are the only fixed and stable receipts. There are besides sources of revenue which fluctuate greatly. A certain sum is received from the Pupil Nurses in payment of their board. This may be put down at about Rs. 250 a month. Then there are the fees earned by the Private Nurses. These vary markedly, and depend both on the demand for Nurses and the state of what is called the Reserved Staff. For instance, owing to the illness of several Nurses the receipts under this head have dwindled alarmingly during the past few months. These receipts may be put down roughly at from Rs. 250 to Rs. 300. Government allow a rebate on the cost of lighting—another Rs. 15 to Rs. 20. Taking every item into account, the average income for the past five months—the period during which the Fund has been on its present basis—was Rs. 2,050 a month. The average expenditure during this period was Rs. 2,308. This money provides for the nursing of 12 only out of the 24 wards in the J. J. Hospital. The other 12 are left entirely to ward boys and ayahs. The Eye Hospital is altogether unnursed; the Bai Motlibai Hospital is, on the whole, fairly well provided for. On a rough estimate 20 Nurses will be required, in addition to the present staff, to meet present needs, and on a basis of Rs. 48 per head, this is equivalent to a further monthly charge of Rs. 960.

Mr. Crowe added that the fund raised by Mrs. Crowe and himself now amounted to a lakh of rupees, and would ultimately produce about Rs. 400 a month. Government would give another Rs. 400, so to meet their minimum requirements, a further considerable sum would have to be annually raised from private sources.

The Chairman added that draft rules had been prepared. These would be circulated and submitted to the next meeting.

Sir Jamsetjee Jeejeebhoy said that before they separated there was one duty to perform—to propose a most hearty vote of thanks to Mr. Crowe for presiding, and he would take this opportunity of expressing, on behalf of the native community, their deep sense of obligation to Mr. and Mrs. Crowe for their great and self-denying efforts to place the nursing of the J. J. Hospital upon a proper basis. The lack of proper nursing facilities at the principal hospital for natives in the City had long been a reproach to Bombay. It was not, however, until these defects

came to the knowledge of Mrs. Crowe that any practical steps were taken to remedy them. Mr. and Mrs. Crowe had been unremitting in their efforts to raise the necessary funds, and it must be an early task of the Committee's to devise means of associating their names prominently with the fund.

Mr. Vijbhukandas Atmaram seconded the proposal, remarking that Mr. and Mrs. Crowe had taken a great deal of trouble to raise the fund, and deserved their warmest thanks. The proposal having been unanimously adopted, Mr. Crowe said that the credit was due not to him but entirely to Mrs. Crowe, because it was she who initiated the movement, and but for her stimulus he did not think anything at all would have been done.

VICTORIA JUBILEE TECHNICAL INSTITUTE.

The question of the procedure for the election of a Representative of the Bombay Millowners' Association on the Board of the Victoria Jubilee Technical Institute came up for consideration during the year.

In the Resolution of the Government of Bombay in the Educational Department, No. 362, dated 8th March 1887, it is *inter alia* laid down that "the Millowners' Association should be asked to nominate one Representative." Accordingly the Committee of the Association, at the Meeting of the 12th March 1887, "resolved that the Chairman, Sir Dinshaw Maneckjee Petit, Kt., be appointed Representative of the Millowners' Association on the Board of Management of this Institute." In the definitive Rules and Regulations of the Institute, printed with its Annual Reports, but without date (though the date may be assumed to be somewhere about the 27th November 1888, when the Memorandum of Association was registered) it is provided :—

"2. The Board shall consist of at least 15 members, and a Chairman who "shall be appointed by Government, and be constituted as follows :—

* * * * * *

"One Member to be elected by the Bombay Millowners' Association so "long as they shall continue to contribute not less than Rs. 2,000 per annum for "the maintenance of the Institute.

* * * * * *

"5. The representatives of the Ripon Memorial Fund shall hold office for "life, and shall have the right of election or filling up vacancies by co-optation.

"6. In case of election or nomination of a successor to any Trustee, his name shall be communicated by the person or persons nominating or electing, to the Government of Bombay, to be published in the "Government Gazette" for notification, and the appointment shall be considered to have been made from the date of such publication.

"7. The Government nominees and the Chairman shall hold office during the pleasure of Government, provided they do not in the meantime cease through disqualification to be Trustees.

"8. Any person ceasing to be a Trustee, unless disqualified under Section 12 ' (*N.B.*—This is evidently a misprint for Section 10 which deals with disqualification, while Section 12 has no such bearing)' shall be re-eligible.

"9. . If any person is absent from the meetings of the Board for a period exceeding 12 consecutive months without leave, he shall cease to be a Trustee."

Section 10, as has been said, deals with disqualification by bankruptcy, &c.

These sections are quoted as showing that with regard to the Government nominees and the representatives of the Ripon Memorial, the tenure of office is laid down, while there is no such provision regarding the representatives of the Municipality and the Millowners. As a matter of fact it is understood that the Municipality has hitherto acted as if their representatives could cease to be members of the Board only on disqualification under Section 9 or 10. The questions that arise are :—

(*a*) Having regard to the fact that in the Government Resolution of the 8th March 1887 the Association is asked to NOMINATE a representative, while in the Rules and Regulations of the Institute it is provided that the representative must be ELECTED, is it competent for the Committee to appoint a representative without election ?

(*b*) If an election is necessary, must such election be made by the body of the members ?

(*c*) Is there anything in the Rules and Regulations of the Institute as quoted above, which means that the Representative of the Millowners' Association shall hold office until death or disqualification under Rule 9 or 10 ?

(*d*) If not, has the Association power to make such Rules as it may think fit both as to the procedure in the election of a Representative and as to the duration of his term of office ?

In view of the above considerations, a Sub-Committee of the Association, consisting of Messrs. H. E. E. Procter, D. E. Wacha, and Vithaldas Damodher Thackersey, was appointed to go into the matter, and with the assistance of the Association's Solicitors a set of rules were drawn up for the consideration of the members of the general Committee. These draft rules were in due course considered by the general Committee, and it was decided that they should be brought forward for adoption at the forthcoming Annual General Meeting of the Association. The proposed rules read as follows :—

1. Any member of the Association shall be eligible as Representative of the Association on the Board of the Victoria Jubilee Technical Institute.

2. The period of office of any elected Representative of the Association on the Board of the said Institute shall be one of three years. At the end of such period he shall retire but may be re-elected.

3. The appointment of the Association's Representative shall be made at a General Meeting of the Association, and such Representative shall *ex-officio* be a member of the Committee of the Association.

4. In the event of the disqualification of the Association's Representative under Sections 9 or 10 of the Rules and Regulations of the said Institute, or in the event of the decease or resignation of such Representative, or in event of his ceasing for any reason to be a member of the Association, the Committee shall appoint a successor, who shall hold office up to that date at which the Representative whom he succeeds would, under Rule 2, have retired.

5. In the event of the absence of the Association's Representative from three or more consecutive meetings of the Board, or in the event of the Association's Representatives applying for leave of absence, the Committee may, if they think fit and with the consent of the Board of the said Institute, appoint a substitute, who shall hold office until the Representative whom he replaces resumes attendance or up to that date at which the Representative whom he replaces would, under Rule 2, have retired.

RULES OF THE ASSOCIATION.

Revision.

In August of 1899 certain questions arose as to the efficiency of Registration of Tickets with the Association ; and the Committee directed, first, that the opinion of the Association's Solicitors be taken in the matter and, subsequently, that the opinion of Counsel be obtained.

This was done, and both opinions showed that the effect of Registration under the existing Rules was open to question.

These opinions were discussed at the ordinary meeting of Committee held in October 1899 ; and since other defects in the Association's Rules were known to exist, a Sub-Committee of five members was appointed to revise all the Rules and to report to the general Committee.

The Secretary of the Association shortly afterwards proceeded to Europe on sick leave, and the matter was for a time lost sight of.

This was probably due to the fact that the papers had not been printed for the detailed study of the Sub-Committee.

In July of the past year the matter was again taken up. The papers were printed and distributed to the Sub-Committee, whose constitution at the same time was slightly modified.

The work of the Sub-Committee proved very laborious and extended over a series of months, the last meeting being held on the 23rd March 1903.

Among other recommendations made by the Sub-Committee in their Report, it was suggested that the new Draft Rules be submitted to the Solicitors of the Association for their advice upon certain special points.

The Solicitors recommended that one of the Rules specified should be amplified. Their opinion regarding the general effect of the Rules was favourable.

It was however felt that, before submitting the new Rules finally to the general body of members, it would be well to have the opinion of an experienced Counsel in the matter; and since the Hon'ble Mr. Basil Scott had been consulted in 1899, it was resolved to refer the entire set of Rules to him for opinion. At the time of passing this Resolution the High Court was unfortunately in vacation and the Hon'ble Mr. Advocate General was absent from Bombay. It was understood that he would probably not return to Bombay till the second week in June ; and the Committee then had to consider whether it would be better to postpone the Annual General Meeting until Counsel's opinion could be received and considered ; or whether, on the strength of the opinions already before them, they ought to hold the Annual General Meeting, pass the Rules as they stood, and hold a Special General Meeting for their amendment should the opinion of the learned Counsel when received be found to necessitate that course.

The Committee, while regretting any further postponement of the Annual General Meeting, for which the Report had been ready for a considerable time, felt that it would be preferable to avoid all chance of having to call the members together twice. They therefore resolved that the Solicitors be asked to obtain the opinion of the Advocate General as soon as possible and that meantime the convening of the Annual General Meeting be postponed.

TRADE-MARKS REGISTER.

SUBJECT-INDEX.

Hitherto registration of a trade-mark with the Association has consisted merely in its insertion in one of the albums kept for that purpose. In these albums the trade-marks have been classified only under the names of the respective mills. No notice was taken of the nature of any of the trade-marks, and if a member desired to find a trade-mark of a particular kind it was necessary that he should scrutinize every page. This demanded time and involved such wear and tear of the Registers as caused serious deterioration.

It is therefore intended to establish, in connexion with the registration of trade-marks under the new Rules, a subject-index by which a member desiring to inspect tickets of a particular kind will be able to ascertain the pages on which they are to be found.

This subject-index is established only for the convenience of members. It is sometimes difficult to say exactly what a particular trade-mark is intended to represent. All reasonable care will be used in describing and indexing the trade-marks. *But the Association accepts no responsibility of any kind for any error or omission in the Index itself or for any error or loss into which a member may be led by such a defect.*

The constitution of the Index is as follows :—

A. Alphabetical List of Objects Depicted, showing—

(*a*) Specification of every trade-mark on which a particular object is depicted.

(*b*) Dates on which these trade-marks were respectively registered.

(*c*) Pages of Register on which copies of said trade-marks are to be found.

B. Serial Record containing the same matter as A, but entered in the order of the dates on which the trade-marks were registered.

HOLIDAYS FOR 1902.

The Committee have, as in previous years, furnished members with a list of the holidays recommended to be observed by the cotton spinning and weaving mills during 1902.

STOCKS OF COTTON IN BOMBAY.

In accordance with the practice observed in previous years, the Committee, after obtaining returns from agents and owners, informed the members, by a circular in the usual way, that the total quantity of cotton held by the spinning and weaving mills in Bombay on 30th June 1902 was 88,047 candies.

STATISTICS.

The usual comparative statements are published in the Appendix, showing the imports and exports of piece-goods and yarns for a series of years, together with the annual statement of cotton spinning and weaving mills working and in course of erection in India on 30th June 1901. The members of the Association have been regularly supplied during the year with the monthly statistical returns published by the Committee, together with the weekly list of quotations of piece-goods and yarn. (*Appendix.* **J.**)

In conclusion, the Committee tender their thanks to the members of the Association for their ready attention to all matters submitted to them, and to express their acknowledgments to His Excellency the Governor-General of India in Council and to His Excellency the Governor of Bombay in Council for the courtesy and attention with which their representations have been at all times received.

APPENDIX A.

BALANCE SHEET OF THE BOMBAY MILLOWNERS' ASSOCIATION.

From 1st January to 31st December 1902.

	Rs. a. p.	Rs. a. p.		Rs. a. p.	Rs. a. p.
To Office rent	720 0 0		By Balance at the credit of the Association on 31st December 1901 :—		
„ Office Salaries	5,245 0 0				
„ Printing	1,567 0 0				
„ Advertisements	51 4 0				
„ Miscellaneous Expenses, Stationery, &c.	355 4 5		General Fund	39,199 7 6	
„ Association's contribution to the Chamber of Commerce Statistical Department	1,200 0 0		Travelling Agency Fund	3,658 8 11	
„ Auditor's Fee	100 0 0				42,858 0 5
„ Law charges...	120 0 0		„ Subscriptions for the year ending 31st December 1902	13,534 10 0	
		9,358 8 5	„ Miscellaneous Receipts	149 15 0	
„ Association's contribution to the Victoria Jubilee Technical Institute for 1902-03	.....	3,000 0 0	„ Interest on Government Paper and Fixed Deposits of General Fund and Travelling Agency Fund	926 12 6	
					14,611 5 6
Balance as under :—					
Government 3½ per cent. Promissory Notes for Rs. 14,000—Cost.	14,251 14 0				
Fixed Deposit with the Yokohama Specie Bank, Ld., for 12 months at 5 per cent.	18,500 0 0				
Cash in the Bank of Bombay	8,305 7 11				
Cash in hand	4 0 0				
Interest not recovered on Rs. 14,000 3½ per cent. Government paper	712 13 9				
Subscription from members due but not recovered	340 15 6				
	42,115 3 2				
Less—Amount due for wages for December and Auditor's Fee.	763 3 3				
		41,351 15 11			
Government 3½ per cent. Promissory Notes for Rs. 3,000 of Travelling Agency Fund Account ... ... Cost	2,934 6 0				
Interest on Rs. 3,000 Government Paper not recovered	200 9 4				
Cash in the Bank of Bombay, Travelling Agency Account ...	623 14 3				
		3,758 13 7			
Total Rupees ...		57,469 5 11	Total Rupees ...		57,469 5 11

Examined and found correct.

NESSERWANJEE SORABJEE JAMSETJEE,
Auditor.

FREDERICK NOEL-PATON,
Secretary.

Bombay, 16*th April* 1903.

Appendix B.

Ventilation of Factories.

No. $\frac{\text{F. I.}}{331}$ of 1902.

FROM

THE COLLECTOR OF LAND REVENUE, CUSTOMS AND OPIUM,
BOMBAY.

To

THE SECRETARY,
THE MILLOWNERS' ASSOCIATION,
BOMBAY.

BOMBAY COLLECTOR'S OFFICE,
FACTORY DEPARTMENT,
17*th July* 1902.

SIR,

The subject of the ventilation of factories and especially of mills has for some time engaged my attention, and though I am aware that a systematic and thorough scheme of improvement has long been essential I have, in consideration of the hardships caused to millowners by the vicissitude of plague and famine, hitherto allowed my inspectors to let the matter wait.

2. As, however, better times seem now to have come I have the honour to ask you if you could help me in carrying the matter through. I do not wish to have to enforce the provisions of rule No. 5* under the Indian Factories Act, inasmuch as to do so might interfere with certain industrial processes, and I am prepared to put off taking this step if you can submit for my approval some system of ventilation which will ensure circulation of pure and not over-humid air in all parts of the mills, and which all millowners will undertake to adopt when it has received my approval.

3. I shall esteem it a favour if you will treat the matter as urgent and let me have a reply at your earliest convenience.

I have, &c.,
E. GRAY,
Collector of Land Revenue,
Customs and Opium,
Bombay.

THE MILLOWNERS' ASSOCIATION,
BOMBAY, 2*nd August* 1902.

To

E. GRAY, ESQ., I.C.S.,
COLLECTOR OF LAND REVENUE, CUSTOMS AND OPIUM,
BOMBAY.

SIR,

Under the instructions of the Committee of the Bombay Millowners' Association, I have the honour to acknowledge the receipt of your letter No. F. I./331, dated 17th July, on the subject of the ventilation of mills.

2. The matter was discussed at a meeting of my Committee held yesterday. They observe that you are not unconscious of the difficulties to be encountered in any attempt to bring the ventilation of the mills into line with Rule 5. Having regard to the processes of Cotton manu-

* *See* Association's Report for 1892, p. 16.

factures, and the known aversion of the operatives to such a circulation of air as appears to be aimed at, my Committee are disposed to believe that even an approximation to the conditions prescribed by Rule 5 will be found unattainable. Nor have they much hope of being able to devise for your consideration any uniform system of ventilation capable of adaptation to all the various types of mill buildings in Bombay. Before even an attempt could be made in this direction it would be necessary to arrive at general principles.

A Sub-Committee was, therefore, appointed consisting of the following members :—The Chairman, Mr. W. Brady, Mr. C. N. Wadia, and Mr. Vithaldas D. Thackersey, with instructions to wait upon you for a preliminary discussion of such principles, and I am directed to beg that you will appoint a day and hour at which you could receive them.

I have, &c.,

FREDERICK NOEL-PATON,
Secretary.

No. $\frac{\text{F. I.}}{406}$ OF 1902.

FROM

THE COLLECTOR OF LAND REVENUE,
CUSTOMS AND OPIUM,
BOMBAY.

TO

THE SECRETARY,
MILLOWNERS' ASSOCIATION,
BOMBAY.

BOMBAY COLLECTOR'S OFFICE,
FACTORY DEPARTMENT,
12*th August* 1902.

SIR,

I have the honour to acknowledge your letter of 2nd August 1902 on the subject of mill ventilation.

2. Some six years ago I made several proposals to secure better ventilation in factories, but none of my suggestions found favour with you. I must request you, therefore, to be so good as to devise some scheme or schemes, for I do not suppose that any one scheme is likely to suit all mills that will ensure the desired end.

3. I see no necessity for any discussion personal or in writing. We are both aware what is required. I have suggested means of attaining it without success. It is now left for you to make your suggestions.

4. In conclusion, I would again call your attention to the desirability of taking the matter in hand at an early date, as I have every intention of applying strictly the provisions of the law, and have only delayed doing so out of regard for the effects on your industry of Plague, Famine and other causes.

I have, &c.,

E. GRAY,
Collector of Land Revenue,
Customs and Opium,
Bombay.

THE MILLOWNERS' ASSOCIATION,
BOMBAY, *27th September* 1902.

To

THE COLLECTOR OF LAND REVENUE,
CUSTOMS AND OPIUM,
BOMBAY.

SIR,

Under the instructions of the Committee of the Millowners' Association I have the honour to acknowledge the receipt of your letter No. F. 1/331, dated 17th July last. It is, the Committee understand, in your knowledge that the matter has engaged their attention since receipt of that letter and that their Secretary has been in communication with you on the subject.

2. The purport of the letter under reply is that you call upon the Association to submit for your approval some system of ventilation which will ensure circulation of pure and not over-humid air in all parts of the mills, and which all millowners will undertake to adopt when it has received your approval. As an alternative to this course you intimate that you will proceed to enforce the provisions of Rule 5.

3. You will understand that the Committee do not dispute that as the law stands at present you are technically right in requiring compliance with the said rule; but the rule in question is impracticable, and they do not think that it is incumbent on them to devise any system until the law is so modified as to give them assurance of that system's permanence. Nor is it in their opinion possible to evolve any system that will be applicable to all the mills in Bombay. All that can be done is to lay down general principles, as is done in the Factories Act in Britain; and in any case they conceive that your letter can scarcely have been written either with appreciation of the extent to which Rule 5 is out of relation to all serious enactments on the subject of ventilation, or with knowledge of the efforts already made by the Association to solve the difficulty.

4. On the 27th June 1895 a deputation of the Association had an interview with the Collector of Customs and the interested officials on the subject, and it was agreed that experiments should be made in the mills of certain members. The arrangements made in pursuance of this agreement were notified to the Chief Inspector of Factories under whose supervision the experiments were to be conducted, and under whose instructions the necessary structural alterations were made. The cost of those experiments was defrayed by this Association, and in March 1897 the Secretary wrote to the Inspector begging that their result might be communicated. The reply of the Inspector, dated 17th May 1897, was to the effect that the information desired could not yet be given. Up to the present time the Association has no knowledge of the results obtained. These facts are reviewed to prevent any misapprehension as to the position of the Association in the matter.

5. The present position, however, may be stated as follows:—The text of the rule in dispute is: "Every factory shall be ventilated to the satisfaction of the Inspector. . . No factory shall be considered ventilated unless ventilating openings are provided in the proportion of 10 square feet for each person employed in any room and the openings are such as to admit of a continued supply of fresh air." It is evidently recognised by you that the provisions of this rule are impracticable; but for a formal admission of the fact I would refer you to the third paragraph of the letter of the Collector of Customs to this Association, dated 5th April 1895. The words are:—"I agree with the opinion expressed from time to time by the Chief Inspector

of Factories that to enforce the scale of lateral openings required by the rule would be unreasonable and would cause unnecessary trouble and expenditure to the Millowners of Bombay." But my Committee desire to submit with the utmost respect that even this admission gives no adequate expression to the absurdity of the provision in question. This can be indicated by reference to certain of the best known Factory Acts at home. One of the most stringent of these in regard to ventilation is the Cotton Cloth Factory Act of 1889, because it applies especially to factories in which the humidity is artificially increased for trade purposes. It would obviously be unreasonable to make the provisions of such an act applicable to all mills throughout, and especially to mills of Indian construction, seeing that only in some parts of some of the mills is humidity artificially maintained. But if the stringent Act in question be examined in comparison with the Bombay Rule 5 the following anomaly is disclosed. The English Act lays down that arrangements must be made for admitting at least 600 cubic feet of air per hour per occupant. Again, if you will be so good as to refer to the fourth para. of the Report of the Presidency Surgeon to the Collector of Customs, dated 4th July 1894, you will find it mentioned that "in England . . the air must not pass in at a greater rate of speed than two feet and a half per second." This I understand is one of the recognised standards of sanitary science. Now, if we assume an opening of one square foot and a velocity of only one foot per second, it is clear that air to a total volume of 3,600 cubic feet (that being the number of seconds in the hour) will enter in one hour by an aperture one foot square. This even, according to the requirements of the above exceptionally stringent Act, is a sufficient supply for six occupants. The apertures required by Rule 5, being ten times as large, would, with an air velocity of only one foot per second, give to each occupant a sufficient supply for sixty people, while, with the healthy limit of velocity, namely 2½ feet per second, such an aperture would give to each occupant a supply sufficient for one hundred and fifty persons.

6. You will, I think, admit that in face of these facts all of which can be easily verified, it would be well to omit from discussion of the subject any mention of this astonishing enactment, and to have it replaced as soon as possible with some other rule capable of guiding successive Factory Inspectors in their work. You have invited this Association to devise a system or systems of ventilation for your approval, and while the Millowners of Bombay will no doubt adapt their arrangements to any reasonable standard of ventilation that may be laid down by Government, and while my Committee will gladly, as in 1894-95, co-operate with your department in arriving at such a standard, they submit that it is strictly the province of Government, so recognised by the existence of Rule 5 such as it is, to formulate the general principles. It is felt by my Committee that much could be done in the way of clearing the ground if you would receive a small deputation of members familiar with the difficulties attending the various known systems of ventilation as applied to Indian mills; and if you can see your way to doing this, a special committee will be appointed to study the whole question afresh and to meet you on a day to be thereafter appointed by you. I am to express the hope that in the orders that may ultimately be passed full consideration will be given to the facts that the Bombay mills have been built at great cost without Government's having laid down any practicable rules for ventilation, and that excessive stringency at this time would impose a very real hardship.

I have, &c.,

FREDERICK NOEL-PATON,

Secretary.

No. $\frac{\text{F. I.}}{556}$ of 1902.

From

The COLLECTOR of LAND REVENUE, CUSTOMS and OPIUM,
Bombay,

To

The SECRETARY,
Millowners' Association,
Bombay.

Bombay Collector's Office,
Factory Department,
3rd November 1902.

Sir,

I have the honour to acknowledge your letter of 27th September last, and to express regret that owing to the absence of one of my assistants I have kept you waiting for a reply.

2. With reference to your third and fourth paragraphs I may state that my previous letters had been written with full knowledge of the efforts made by your Association and my predecessor to arrive at some solution of the ventilation difficulty. I express my regret that the letter of May 17th 1897 from the Chief Inspector of Factories in answer to yours of 29th March 1897 was not followed by another, and in explanation I can only conclude that he assumed that you kept yourself informed of the results of experiments conducted at your expense, and that when the last of these was abandoned as unworkable by the Bombay Cotton Mills he supposed you were aware of it. I am sorry if this was not the case.

3. As regards the present position I may state that the rule in dispute, even if the provision of a 10-foot square lateral opening were eliminated as impracticable, would leave it for the Inspectors of Factories to decide in each case if any part of a factory were or were not adequately ventilated, and this, I think, is the ultimate point to which we must always come if other measures fail.

4. It is, however, desirable that, though it may not be possible to prescribe any general method of attaining the desired end—good ventilation,—we should come to some understanding as to what should constitute "good ventilation," with a view to being able to approach Government and ask them to define this once and for all, after cancellation perhaps of the rule providing for lateral openings of the size we both consider impracticable. The new definition may perhaps take the form of a rule prescribing a certain movement and volume of air, a limitation of the amount of humidity and of the amount of Carbonic Acid Gas, and so on. Might I ask you, therefore, to lend me copies of the Acts in force in England (excepting the Cotton Cloth Factories Act of 1889) and any literature on the subject that puts the facts (the case for both sides) clearly and concisely, and to favour me with some pronouncement as to the atmospheric conditions which you are prepared to arrange to secure and which you consider are sufficient to ensure the health of your employés. With this to work on I hope to be able to take expert medical advice and submit the case to Government for orders.

I have, &c.,
E. GRAY,
Collector of Land Revenue,
Customs and Opium,
Bombay.

THE MILLOWNERS' ASSOCIATION,
BOMBAY, *8th November* 1902.

THE COLLECTOR OF LAND REVENUE, CUSTOMS AND OPIUM,
BOMBAY.

SIR,

Under the instructions of the Committee of the Bombay Millowners' Association I have the honour to acknowledge the receipt of your further letter No. F. I./556 of the 3rd instant on the subject of ventilation of mills.

2. I am to say that copies of the Factory Acts and the rules for ventilation under those Acts have been ordered from England, and when they have been received the Committee will hope to make a further communication to you with a view to establishing some general principles of ventilation applicable to Indian mills.

I have, &c.,
FREDERICK NOEL-PATON,
Secretary.

No. $\frac{\text{F.I.}}{143}$ OF 1903.

FROM

THE COLLECTOR OF LAND REVENUE, CUSTOMS AND OPIUM,
BOMBAY.

To

THE SECRETARY,
THE MILLOWNERS' ASSOCIATION,
BOMBAY.

BOMBAY COLLECTOR'S OFFICE,
FACTORY DEPARTMENT,
26th March 1903.

SIR,

With reference to the correspondence on the subject noted in the margin, ending with your letter, dated 8th November 1902, I am directed to inform you that Government will be prepared to co-operate with your Association in investigating the extent to which the air in Cotton mills is vitiated by the presence of impurities by lending the services of a trained analyst or in such other manner as may be agreed upon.

Ventilation in Mills.

2. I shall, therefore, be glad to hear from your Association whether they are prepared to co-operate in the matter, and I would suggest that your Association should appoint a deputation to meet me and arrange the necessary preliminaries to such a step.

I have, &c.,
E. GRAY,
Collector of Land Revenue,
Customs and Opium,
Bombay.

MILLOWNERS' ASSOCIATION,
8th April 1903.

E. GRAY, Esq., I.C.S.,
COLLECTOR OF LAND REVENUE, CUSTOMS AND OPIUM,
BOMBAY.

SIR,

Under the instructions of the Committee of the Millowners' Association I have the honour to acknowledge the receipt of your letter No. F. I./143, dated the 26th March, dealing further with the question of the Ventilation of Factories. I am to say that the Association remains most willing to co-operate with Government in an effort to ascertain how far the air of the local Cotton mills is vitiated, and that the Committee have appointed the gentlemen named below to meet you at your convenience and discuss the necessary preliminaries with a view to arriving at some general principles of ventilation.

2. I am to add that the Association some time ago obtained from home a copy of a book lately published upon the law relating to Factories and Workshops as amended by the Act of 1901, and a copy of the more recently issued Report of the Departmental Committee upon the Ventilation of Factories. This latter gives the very latest expert recommendations on the subject, and is expected to be of considerable service at the present juncture. I have the honour to send you both the book and the Report for perusal; and I am to beg that you will be good enough to return both publications some time before the proposed conference in order that the members of the deputation may go into the matter fully.

3. The Report in question contains a description of a portable apparatus designed by one of the members of the Departmental Committee for the analysis of air in factories. My Committee are advised that the fact of this apparatus being designed to deal with so small a measure of air, will render necessary considerable care in avoiding breathing on it or otherwise causing local contamination of the air at the moment of drawing the sample. But they believe that with suitable precautions it should be possible for an analyst not possessed of the very special training and experience so rare in India to obtain fairly accurate results. One of these apparatus was accordingly ordered from home, and advices were received some time ago to the effect that it was being constructed. It is therefore expected to arrive shortly, and on its receipt the Committee propose to arrange for a series of experiments which will doubtless afford valuable guidance.

I have, &c.,
FREDERICK NOEL-PATON,
Secretary.

Names of members deputed to meet the Collector :—
The Hon'ble Mr. Bomonjee D. Petit.
Sassoon J. David, Esq.
W. Brady, Esq.
N. N. Wadia, Esq.
Vithaldas D. Thackersey, Esq.

No. $\frac{\text{F. I.}}{165}$ OF 1903.

FROM
THE COLLECTOR OF LAND REVENUE, CUSTOMS AND OPIUM,
BOMBAY.

To
THE SECRETARY,
THE MILLOWNERS' ASSOCIATION,
BOMBAY.

BOMBAY COLLECTOR'S OFFICE,
FACTORY DEPARTMENT,
21*st April* 1903.

SIR,

I have the honour to acknowledge the receipt of yours of 8th instant and to return with thanks the two books forwarded therewith.

2. I shall be very pleased to meet the members of your Association deputed to confer with me on the steps to be taken to ascertain the state of the air in the local Cotton mills and the means of arriving at some definite conclusions on the subject of ventilation.

3. I would suggest 3 p.m. on Monday, 4th May, as a suitable time for the meeting, which might take place either at the offices of your Association or in my office here in the Custom House.

4. Should the above date not be a convenient one to the members of your deputation would you kindly request them to fix on some other day in the same week and communicate it to me ?

5. I have requested my assistants, Messrs. Gubbay, I.C.S., and Martin, I.C.S., and Mr. Engel, Inspector of Factories, to be present with me to meet the deputation.

I have, &c.,
E. GRAY,
Collector of Land Revenue,
Customs and Opium,
Bombay.

MILLOWNERS' ASSOCIATION,
BOMBAY, 29*th April* 1903.

To
THE COLLECTOR OF LAND REVENUE, CUSTOMS AND OPIUM,
BOMBAY.

SIR,

Under the instructions of the Committee of the Bombay Millowners' Association I have the honour to thank you for your letter No. F. I./165 of the 21st instant and for the Book and Report on Ventilation returned by you.

2. An attempt has been made to circulate these papers to the members of the deputation and to arrange that they should meet you on the 4th proximo as proposed, but Mr. Bomonji Dinshaw Petit and Mr. Vithuldas Damoder Thackersey are both absent from Bombay, and in so important a matter the Committee would much prefer that these gentlemen should either be present or have time to furnish the other members with a note of their views. If, therefore, it would not be inconvenient to you to postpone the conference for a few days the Committee will communicate with these two gentlemen and let you know the earliest date on which they could be present.

3. I am also to ask whether you have any objection to their asking Mr. John Wallace, C.E., to accompany the deputation, as he has more knowledge of the technicalities of ventilation than they possess and his instructions would be valuable.

I have, &c.,
FREDERICK NOEL-PATON,
Secretary.

No. $\frac{\text{F. I.}}{198}$ OF 1903.

FROM
THE COLLECTOR OF LAND REVENUE, CUSTOMS AND OPIUM,
BOMBAY.

To
THE SECRETARY,
THE MILLOWNERS' ASSOCIATION,
BOMBAY.

BOMBAY COLLECTOR'S OFFICE,
FACTORY DEPARTMENT,
30*th April* 1903.

SIR,

I have the honour to acknowledge the receipt of yours of the 29th instant, and in reply to state that I shall be glad to meet the members of your deputation on any later date which may be found more suitable. Kindly communicate this date to me as early as possible.

2. I have further to state that I have no objection whatever to Mr. Wallace, C.E., accompanying the deputation.

I have, &c.,
E. GRAY,
Collector of Land Revenue,
Customs and Opium,
Bombay.

Appendix C.

Alleged Short Reeling of Indian Yarns.

THE SOUTHERN MAHRATTA SPG. & WVG. CO., LD.,
BOMBAY, 26*th March* 1902.

THE SECRETARY,
THE BOMBAY MILLOWNERS' ASSOCIATION,
BOMBAY.

SIR,

We beg to submit for the information of your Committee an extract from a recent Directors' report of the Bangalore Woollen, Cotton and Silk Mills, Co., Ld., of which Messrs. Binny & Co. of Madras are the Agents, bearing reference to the practice of short reeling that obtains in some of the mills of this Presidency. The extract is as follows :—

"The importation into Mysore from the Bombay Presidency of yarn of falsely described counts and lengths is increasing, and is now a matter of serious consequence to these mills. Yarn actually only 18's, and correspondingly short reeled, is frequently sold as 20's, and as the Market difference between 18's and 20's is two annas per bundle, the honest producer is handicapped to this extent. False trade descriptions of this kind are prohibited by the Mysore Merchandise Marks Regulation of 1892, but though cases have been repeatedly brought to the notice of the police, we are aware of no instance in which action has been taken on our representations."

As the question of short reeling has recently been before the Chamber of Commerce, we think the above extract may be of interest to your Association.

Yours faithfully,
P. CHRYSTAL & Co.,
Secretaries & Managers.

MILLOWNERS' ASSOCIATION,
BOMBAY, 5*th April* 1902.

THE AGENTS,
SOUTHERN MAHRATTA S. & W. Co., Ld.

DEAR SIRS,

I am directed by the Committee of the Bombay Millowners' Association to acknowledge the receipt of your letter of the 26th March in which you quote from a recent Directors' Report of the Bangalore Woollen, Cotton and Silk Mills Company, Ld., certain remarks on the subject of short reeling said to be practised by certain mills in this Presidency.

The Committee note the substance of the passage quoted by you, but regret that they cannot accept a general imputation against mills not named, and will be obliged if you will favour them with the names of those Mills to which the accusation specially relates.

I am, Dear Sirs, Yours faithfully,
FREDERICK NOEL-PATON,
Secretary.

CHAMBER OF COMMERCE,
BOMBAY, *4th September* 1902.

THE SECRETARY,
MILLOWNERS' ASSOCIATION,
BOMBAY.

DEAR SIR,

I am instructed by the Committee of the Bombay Chamber of Commerce to wait upon you with copies of letters addressed to this Chamber by the District Magistrate and Inspector of Factories, Sholapur, together with a statement showing the results of the tests desired by that official which has been forwarded to him. I am also to attach a copy of a communication from Messrs. Greaves, Cotton & Co. on the subject.

I am, Dear Sir,
Yours faithfully,
FREDERICK NOEL-PATON,
Secretary.

No. 4614 OF 1902.

SHOLAPUR, *24th July* 1902.

FROM

A. F. MACONOCHIE, ESQ., I.C.S.,
DISTRICT MAGISTRATE AND INSPECTOR OF FACTORIES,
SHOLAPUR.

TO

FREDERICK NOEL-PATON, ESQ.,
SECRETARY OF THE CHAMBER OF COMMERCE,
BOMBAY.

SIR,

My attention was called, some months ago, to complaints of short reeling of 20's yarn alleged to be practised in the cotton mills of Sholapur, to the wrongful detriment of other mills in adjacent districts. This count of yarn constitutes about 70 per cent. of the local output, being used for the manufacture of the coarse clothes worn by the mass of the population. Put shortly the complaints amount to this—That the weavers want the full number of 20 knots in a bundle of 20's yarn, but like a coarser thread than real 20's, as stronger and less liable to break in weaving; it is, of course, impossible to give the full number of knots of thicker thread and full length without increasing the weight and consequently the cost; but increased cost means diminution of profits if the price is not raised, while to raise the price means to lose the market; that accordingly to keep the weight and cost the same as those of real 20's, and at the same time meet the demand of the weavers for a coarser thread, the *Sholapur* mills make up as 20's yarns of lower counts, correspondingly reducing the length of the 840 hank; the weavers see the full number of knots and a coarser thread, and are satisfied, not knowing or not caring that the length is deficient, and refuse to buy honest 20's of full length, saying that the thread is thin and weak; and that in this way dishonest goods labelled with a false trade description oust honest goods from their natural local markets, where they have previously commanded a legitimate popularity.

2. It seems to me that in a manufacture, in which, with the best machines, human agency is necessarily so largely involved, absolute exactness of production is impossible, and that fair approximation to fixed standards is all that can possibly be expected. As at present advised

I am not satisfied that the Sholapur Mills deviate from the prescribed standards to a serious extent, or any more than most other mills in the Presidency : the yarn turned out by other mills is regularly examined by the Manager here, and records of the results are kept, many of which I have myself scrutinised. In a great number in fact, I believe I am correct in saying, in the majority of cases, the yarn sold as 20's turns out to be not exactly of that count, but coarser or else mixed—some 20's, some 18's, some 22's and so on. Both the brands known as "Horse Chop" seem certainly not to be exact 20's (even though they purport to be manufactured in England), while a sample from the Hubli Mill, the Secretaries and Managers of which are the chief complainants, turned out, amusingly enough, to be between 18's and 19's instead of 20's as it was labelled. It would seem, therefore, that they should put their own house in order before complaining of their neighbours. There is no doubt that Sholapur products have largely displaced theirs in their vicinity, but this is ascribed here to want of equality in the thickness of their thread, due to inefficient management, in contrast to the steady uniform quality of the Sholapur yarn.

3. Not being an expert I am unable to offer an authoritative opinion, but, as anything that throws light upon the controversy must be of interest, I beg that the Chamber will have tested for me, by independent and thoroughly competent parties, the four bundles of yarn, products of the three Sholapur Mills, which I am sending you in a railway parcel, and for which I enclose the receipt note. One is from the Sholapur Mill, one is from the Lakhsmi Mill, and two are from the Narsinggirji Mill. I selected them myself at surprise visits last evening and this morning from the stock put up for despatch, so there is no doubt that they are fair average samples. They are all marked as 20's. The two samples from the Narsinggirji Mill bear, one a green, and the other a yellow ticket. The green ticket is said to be used more for yarn sold here, the yellow for yarn sent to other districts. Some say that the green ticket covers a stouter thread. The result of the test will be interesting, and when I get it I shall be able to see by comparison with already recorded tests of the products of the mills in other districts, whether the Sholapur Mills are so much in fault as has been alleged, and so much more to blame than their competitors.

I have the honour to be, Sir,
Your most obedient servant,
A. F. MACONOCHIE,
District Magistrate.

No. 4751 OF 1902.

FROM

A. F. MACONOCHIE, ESQ., I. C. S.,
COLLECTOR OF SHOLAPUR.

To

FREDERICK NOEL-PATON, ESQ.,
SECRETARY OF THE CHAMBER OF COMMERCE,
BOMBAY.

SHOLAPUR, 29*th July* 1902.

SIR,

In continuation of my letter No. 4614 of the 24th instant, I have the honour to forward by railway parcel, receipt-note for which is enclosed, two hanks of 20's yarn, one with dark-grey tie, and the other with light-grey tie, taken in my presence, the former from a bundle of the Sholapur Mill's production, and the latter from a bundle of the Narsinggirji Mill's production. I wish you would be so kind as to have them tested for me. I am unable to say whether either of them are of proper length, but, on stretching them, it is apparent that the former is about two inches shorter than the latter, which means a difference of say 20 threads, or 30 yards in length

2. I have also the honour to forward, in the same parcel, a bundle of yarn produced by the Hubli Mill, recently bought at Adoni in the Bellary District. You will see that it has not been opened, and that the label is intact. On the label, the yarn is described as being of 18½ count, but in the bundle are 20 knots, not 18½ as there should be. This is an apparent device to pass off a coarser thread as 20's, and this on the part of the very people who complain of similar tricks on the part of the Sholapur Mills. Comment is needless. I shall be much obliged if you will have this yarn also tested, in order that we may see if it is short reeled in addition to being improperly bundled, and if it is really 18½ count as its label describes it.

I have, &c.,
A. F. MACONOCHIE,
Collector.

1, FORBES STREET,
BOMBAY, 11*th August* 1902.
No. G-451108.

THE SECRETARY,
CHAMBER OF COMMERCE,
BOMBAY.

DEAR SIR,

With reference to your letter of the 31st ultimo, we have had the five samples of yarn, sent along with it, tested and the report of the same is as under :—

"Report on the yarn sent for trial by the Committee of the Chamber of Commerce.
This yarn has been carefully tested and examined with the following results :—
No. 1 is 20's yarn and reeled properly.
No. 2 is 18·68's „ „ „
No. 3 is 19·65's „ short by 6 threads in each case.
No. 4 is 18·38's „ „ 5 „ „ „
No. 5 is 19·59's „ „ 5 „ „ „
which speaks for itself. We also send herewith papers showing in detail the wrapping test, etc., of all the five samples separately.

We are, Dear Sir,
Yours faithfully,
GREAVES, COTTON & Co.

BOMBAY CHAMBER OF COMMERCE.

Yarns from Sholapur.

SUMMARY OF REPORTS BY VARIOUS FIRMS.

In each case there has been some variation in the system of examination pursued by the firms to which the yarns were submitted. But it has been possible to get out the length (average) in yards and the average count in each case. They are as follows :—

No. 1. SHOLAPUR MILL.

Greaves, Cotton & Co.	...	...	...	...	...	Yards.	827·4	Counts.	20·00
Mr. Sassoon J. David	...	...	...	...	...	„	833·0	„	18·49
„ Procter	...	...	...	...	...	„	891·0	„	20·56
„ Wadia	...	...	...	...	...	„	824·5	„	20·45
„ Tata ...	...	...	...	...	...	„	850·0	„	20·40
						Average yards ...	845·2	„	19·98

No. 2. LAKHSHMI MILL.

Greaves, Cotton & Co.	...	...	...	...	...	yards.	842·1	Counts.	18·68
Mr. Sassoon J. David	...	...	...	...	...	,,	813·0	,,	19·74
,, Procter	...	...	...	...	...	,,	838·1	,,	20·53
,, Wadia	...	...	...	...	...	,,	817·5	,,	20·80
,, Tata ...	...	...	...	...	...	,,	854·0	,,	20·89
					Average yards ...		832·9	,,	20·13

No. 3. NARSINGGIRJI MILL. (GREEN TICKET.)

Greaves, Cotton & Co.	...	...	...	...	...	yards.	777·0	Counts.	19·65
Mr. Sassoon J. David	...	...	...	...	...	,,	774·0	,,	18·68
,, Procter	...	...	...	...	...	,,	803·1	,,	19·45
,, Wadia	...	...	...	...	...	,,	793·5	,,	19·70
,, Tata ...	...	...	...	...	...	,,	834·0	,,	19·16
					Average yards ...		796·3	,,	19·33

No. 4. NARSINGGIRJI MILL. (YELLOW TICKET.)

Greaves, Cotton & Co.	...	...	...	...	...	yards.	795·9	Counts.	18·38
Mr. Sassoon J. David	...	...	...	...	...	,,	778·0	,,	18·53
,, Procter	...	...	...	...	...	,,	805·7	,,	20·07
,, Wadia	...	...	...	...	...	,,	822·0	,,	20·35
,, Tata ...	...	...	...	...	...	,,	840·0	,,	19·83
					Average yards ...		808·3	,,	19·43

No. 5. SOUTHERN MAHRATTA MILL.

Greaves, Cotton & Co.	...	...	...	...	...	yards.	795·9	Counts.	19·59
Mr. Sassoon J. David	...	...	...	...	...	,,	772·0	,,	19·31
,, Procter	...	...	...	...	...	,,	762·5	,,	20·62
,, Wadia	...	...	...	...	...	,,	792·0	,,	19·55
,, Tata ...	...	...	...	...	...	,,	817·0	,,	19·35
					Average yards ...		787·9	,,	19·69

FREDERICK-NOEL PATON,
Secretary.

MILLOWNERS' ASSOCIATION,
BOMBAY, *6th October* 1902.

THE SECRETARY,
BOMBAY CHAMBER OF COMMERCE,
BOMBAY.

DEAR SIR,

Short Reeling of 20's Yarn.

I am instructed by the Committee of the Bombay Millowners' Association to acknowledge the receipt of your letter of the 4th ultimo, and to thank you for the copies of correspondence which you have been good enough to place at their disposal on the above subject.

Yours faithfully,
FREDERICK NOEL-PATON,
Secretary.

No. 6494 OF 1902.

REVENUE DEPARTMENT,
BOMBAY CASTLE, *17th September* 1902.

To
THE SECRETARY,
BOMBAY MILLOWNERS' ASSOCIATION,
BOMBAY.

SIR,

Government have had their attention drawn to the proceedings of the Chamber of Commerce, Bombay, reported in the issue of the *Times of India*, dated 13th March 1902, and to those of the Bombay Millowners' Association reported in the issue of the same paper, dated 25th

April 1902, with special reference to the practice of short-reeling of yarn. There appears to be reason to believe that there is now or lately has been in some mills in this Presidency a systematic violation of the law, and that if it is not stopped, others may have to short-reel for their own protection. The purchasers, who are defrauded, have neither the means nor the intelligence to prosecute, and one millowner can hardly be expected to incur the odium of prosecuting another. In these circumstances it becomes a matter for consideration whether Government should not undertake prosecutions, if they are necessary, to put a stop to this practice. But, before taking any steps in the matter, the Governor in Council would be glad to have the benefit of the opinion of the Association.

2. If prosecutions are undertaken by Government, the following would seem to be the proper procedure :—It being undesirable that use should be made of any rules under the Cotton Duties Act to obtain information for this purpose, the Inspector of Factories would purchase in the open market and have tested yarn which he found reason for suspecting. The yarn would be purchased in the presence of witnesses, and the place and hour of testing would be notified to the Manager of the producing mill, with an intimation that he or a representative was at liberty to be present at the testing. If the result of the test in any case was to show that a false trade description had been applied to the yarn, application would be made to Government for sanction to prosecute, which in the first instance at any rate should be required.

3. It will of course be understood that, if action is to be taken as suggested above, it cannot be confined to Bombay, but must be equally applied in other provinces.

4. I am to request that the matter may receive the consideration of the Association, and that Government may be favoured with their opinion at an early date.

I have, &c.,
H. WILKINSON,
Acting Under-Secretary to Government.

MILLOWNERS' ASSOCIATION,
BOMBAY, *27th October* 1902.

THE ACTING UNDER-SECRETARY TO GOVERNMENT,
REVENUE DEPARTMENT,
BOMBAY.

SIR,

Under the instructions of the Committee of the Bombay Millowners' Association, I have the honour to acknowledge the receipt of your letter No. 6494, dated 17th ultimo, on the subject of the short-reeling of yarn said to be practised by certain mills in India, and of the expediency of undertaking prosecutions to stop the practice.

2. The matter has received the careful attention of the Committee ; and as the subject is one which presents great technical difficulties, they hesitate to advise Government to adopt any measure that would be ineffective.

3. The reeling of yarn is the only way in which yarn can be effectively placed on the market in localities distant from a spinning mill. The reel, whilst transforming the yarn from cops or bobbins into knots for the convenience of packing, is also a measuring machine, showing the hanks or leas of yarn. On a correct reel, one lea would measure 120 yards ; and 7 leas, each of 120 yards, would measure a hank of 840 yards, which latter is the basis of counts, as a certain number of hanks, each measuring 840 yards, must weigh 1lb. Avoirdupois (7,000 grains) to represent the specified counts.

Example :—

1 hank of 840 yards weighing 1lb. ...	...	...	...	...	=	Count No.	1
10 hanks each 840 yards weighing 1 „ ...	...	...	...	...	=	„ „	10

Twenty hanks each 840 yards weighing 1 lb. = Count No. 20's, so that the standard measures of yarn are length, and weight of such length ; several hanks are tied together and form a knot. Several knots are compressed and form a bundle ; and in this form, after being pressed into a bale, the yarn goes or should go to market, with a label correctly indicating the count.

4. If all yarns went to market as detailed in para. 3, there could be no question about short-reeling. But, unfortunately, perfect exactness cannot be maintained when dealing with the production of any large mill, especially as the work has to be performed through the agency of human labour. Differences will be found to arise in (*a*) length, (*b*) weight of a given length.

5. As regards (*a*) length, such differences may be caused by (*i*) carelessness of human labour, (*ii*) fraud.

As for (*i*) the utter unmanageability of the Indian reeler (chiefly female) prevents any prospect of any immediate improvement. When an end of thread breaks in the reeling, from whatever cause, it should be pieced up immediately, or there will be a deficiency in the theoretical length. The worker may not see, or may be indifferent to, the broken end and a deficiency in length caused. With a bad reeler or even with a fairly good reeler when dealing with cop bottoms or bobbin ends, this carelessness may at times be so gross as to closely approximate in effect to the result of purely fraudulent work. As for (*ii*) the fraudulent reeling would be indicated by some variation from the mechanical standard of reeling or by deliberate bad reeling. The variation from mechanical standards could be easily detected by an expert, but the deliberate bad reeling can be said often to approximate to the carelessness alluded to above ; so that the difference between fraud and carelessness is so narrow or might be so narrow, that it might be difficult to prove which was in evidence.

6. As regards (*b*) weight of a given length, the greater the short-reeling [from (*i*) carelessness, or (*ii*) fraud] the heavier the yarn would have to weigh in order to make a full weight bundle. The heavier the yarn, *i.e.*, the greater the deviation from the count indicated by the label stating the nominal count of yarn, the greater the illegitimate profit of the spinner owing to the lesser cost of production of lower count yarn, whilst the yarn is supposed to be retailed on the basis indicated by the label. At first sight the weight test would seem to be a correct and definite way of proving short-reeling, but there are several practical difficulties in this matter which lessen the value and efficiency of the test. The Committee would point out that the spinning of low count yarn is somewhat irregular as is apparently acknowledged by the variation allowed by the Merchandise Marks Act, in count above 2½% and count 2½% below the alleged count, and as shown in mill practice where occasionally " light " and " heavy " yarns have to be spun to make up the average of the proper count.

Again grey cotton yarn is extremely sensitive to moisture, and, in using the weight test in India, it would be necessary to know the hygrometrical difference between the time of spinning and the time of testing. Variation in locality would also gravely affect the test.

As yarn is usually exposed for sale in the shops in bundles or loose knots, the results of varying atmospheric conditions would be so marked as to render the weight test quite unreliable for the legal definiteness requisite to prove a fraud.

7. The Committee have seen the figures of the tests made through the Agency of the Bombay Chamber of Commerce of various yarns forwarded by the District Magistrate and Inspector of Factories at Sholapore. In these figures there are some indications of short-reeling but not sufficiently so to prove that short-reeling was fraudulent and not merely careless.

8. The Committee have dwelt on the above detail to show that there is immense difficulty in *proving* which is accidental short-reeling, and which is fraudulent short-reeling. That there are both kinds, the Committee have little doubt; but, under the circumstances recited, they do not see any really practical way in which Government can intervene to efficiently protect the interests of the hand-loom weavers in India. The weaver may be said to be unintelligent ; but he certainly knows well enough that he prefers the stronger yarn, approximating to the thick-

ness he wants. Hence a market for short-reeled yarns. His natural aptitude will also indicate to him that he gets a longer length of cloth from the finer yarn, and so long as he gets what he thinks suits him best, that is the yarn he will buy, if not too deeply in the debt of his sowkar. The trade label might properly be altered to say 17's, 18's, 19's instead of 20's; but whilst regretting that they think there is a possibility of the necessity of proceedings, the Committee have above shown the difficulty of actually and distinctly proving a fraud within a reasonable range of count. The Committee deprecate short-reeling, and would welcome any practical solution of the difficulty.

It is suggested in the letter from Government under reference that Government intervention through the Agency of the Collector and his staff of Inspectors would minimise the evil of short-reeling, but this would inferentially only apply to such yarn as was to be exposed for sale in India, and not for yarn intended for export from India. To discriminate in the mill would be practically impossible, and the Committee would respectfully deprecate Government intervention for an unattainable purpose.

9. In para. 4 a reference is made to some variation from the mechanical standard of reeling, and if Government should still deem it necessary to endeavour to minimise the evil of short-reeling, such mechanical standard could be supervised by the staff of Factory Inspectors, although even then it would fail of absolute effect owing to the fallibility of humanity.

I have, &c.,
FREDERICK NOEL-PATON,
Secretary.

Appendix D.

Packing of Bales of Yarn for Eastern Ports.

BOMBAY, *27th October* 1902.

To

THE SECRETARY,
BOMBAY MILLOWNERS' ASSOCIATION,
BOMBAY.

SIR,

We, the undersigned exporters of yarn to China, having, for several years past, endeavoured in vain to come to a satisfactory and definite understanding with Shipping Companies on the question of the individual responsibilities attaching to the Exporters and Shipping Companies in respect of damage caused to the bales during the voyage, beg to approach you on the subject with a view to placing the matter in the hands of the Millowners' Association, and arriving, through their kind offices, at some practical solution of the difficulties. The Association, we have reason to believe, are thoroughly acquainted with the circumstances under which we have to tolerate heavy losses, considerable annoyance, and much waste of valuable time owing to disputes raised by the Shipping Companies regarding claims against damaged bales at port of destination. It is also within the experience of the Association that for some reason or other it has hitherto proved extremely difficult to obtain from the P. & O. S. N. Company, who are the biggest carriers, any such definite statement as to what they consider to be "sufficient packing" as would enable merchants and millowners to come to a clear conclusion as to their risks and liabilities. We may, however, state briefly that the losses and annoyance caused to shippers by the Steamship Companies protecting themselves behind the insufficiently packed clause are becoming day by day more intolerable, and it has therefore become absolutely incumbent upon us to endeavour, as soon as possible, to fix the individual responsibilities of the shipper and the carrier in regard to claims in a most definite manner, so that it would not be open to the carrier to disclaim responsibility on sufficiently packed bales that are landed in a chafed, oil or fresh water stained or otherwise ship-damaged condition.

In order to remedy this state of affairs we are of opinion that the matter should be seriously taken up on our behalf by the Millowners' Association. The P. & O. S. N. Company should, in fairness to the shippers, declare in so many words—to be claused if desirable in the Bill of Lading itself—what kind of packing they would consider sufficient. If the Millowners' Association would obtain this declaration from them on the understanding that claims would henceforth be entertained according to the new definition to be approved by the Millowners, the difficulty will, in a great measure, be solved as far as the Steamship Companies are concerned.

Having explained the nature of our grievance and the remedy we suggest, we shall feel obliged if your Association will kindly bring the matter before the P. & O. S. N. Company at as early a date as possible. We need not repeat that the annoyance and losses arising out of the present state of things are becoming intolerable, and we therefore sincerely hope that the matter will be taken up by the Association in a prompt and vigorous manner.

Thanking you in anticipation for your courtesy,

We remain,
Yours faithfully,
DAVID SASSOON & Co., Ld.
E. D. SASSOON & Co.
SASSOON J. DAVID & Co.
CURRIMBHOY IBRAHIM & Co.
TATA & Co.
CURSETJI BOMANJI & Co.
P. F. TALATI.
R. S. WOONWALLA & Co.
FRAMJI, SONS & Co.
SILAS E. SASSOON.
EBRAHIM NOORDIN & Co.
R. S. N. TALATI & Co.
YAN SHUN & Co.
TALATI & Co.

MILLOWNERS' ASSOCIATION,
BOMBAY, *8th November* 1902.

MESSRS. DAVID SASSOON & Co., LD.
(AND OTHERS.)

DEAR SIRS,

I am directed by the Committee of the Bombay Millowners' Association to acknowledge the receipt of your letter of the 27th ultimo on the subject of the packing of yarn for China; and to say that a communication in the matter has been received from the allied Lines. The question which, as you know, has previously occupied the attention of the Committee, was again considered at yesterday's meeting, and a further letter is being addressed to the Steamship Lines with a view to establishing a satisfactory definition of sufficient packing.

I am, dear Sirs,
Yours faithfully,
FREDERICK NOEL-PATON,
Secretary.

P. & O. Steam Navigation Company,
Bombay, 29*th October* 1902.

The SECRETARY,
Bombay Millowners' Association,
Bombay.

Dear Sir,

Referring to previous correspondence on the subject of packing of bales of yarn, we beg to state that, in our opinion, the *minimum* which should be held to constitute sufficient to protect them is a covering of good tarpaulin—not the very inferior substitute frequently now used—and at least one outer cover of *good* gunny, but preferably *two*. The tarpaulin should protect the entire bale not merely the sides or ends.

We would, at the same time, remind you that as claims are paid in accordance with the terms of the Bill of Lading at port of destination, it necessarily rests with our representatives there to determine whether the ship is liable or not. We are, however, sending a copy of this letter to Hongkong and Shanghai for the information of our Agents there.

We are, Dear Sir,
Yours faithfully,
FRANK RITCHIE,
Superintendent, P. & O. S. N. Co.
E. SCARPA,
Agent, Austrian Lloyd's S. N. Co.
T. HENKIYAMA,
Acting Manager, Nippon Yusen Kaisha.
* * *
Agent, Rubattino S. N. Co.

Millowners' Association.
Bombay, 8*th November* 1902.

The SUPERINTENDENT, P. & O. S. N. Co.,
The AGENT, AUSTRIAN LLOYD'S S. N. Co.,
The AGENT, RUBATTINO S. N. Co.,
The AGENT, NIPPON YUSEN KAISHA,
Bombay.

Dear Sirs,

I am directed by the Committee of the Bombay Millowners' Association to acknowledge the receipt of your joint letter of the 29th ultimo, on the subject of the packing of yarn for China. The Committee had already received, from a large number of exporters of yarn, a representation on the same subject, and the two communications were considered together at the meeting of the Committee held yesterday.

I am instructed to say that the Committee regret that the definition of sufficient packing given in the first paragraph of your letter is in itself still indefinite, and that it is in the second paragraph further qualified by the statement that in any case the payment of claims will still be in the discretion of your Agents at port of destination.

I am to remind you of your letter of the 16th January last, in which you stated that you had written to the Company's representative in China with a view to defining sufficient packing, and I am to say that the Association still awaits the information desired.

I am, Dear Sirs,
Yours faithfully,
FREDERICK NOEL-PATON,
Secretary.

P. & O. Steam Navigation Company,
Bombay, 11*th November* 1902.

The SECRETARY,
Bombay Millowners' Association;
Bombay.

Dear Sir,

We beg to acknowledge the receipt of your letter of the 8th instant, with reference to the definition of what may be held to constitute sufficient packing of yarn for China.

In reply, we have to state that we are unable to perceive in what way the definition given in our letter of the 29th ultimo can be considered as still indefinite. We therein expressed the opinion that nothing short of a complete inner covering of good tarpaulin and one outer cover of really good gunny would suffice, though we should prefer to see two of the latter.

Our reference to the fact that claims are settled at port of destination was made because it must necessarily rest with our Agents there to judge whether the tarpaulin and gunny used is sufficiently good and stout to stand ordinary wear and tear.

We are, Dear Sir,
Yours faithfully,
FRANK RITCHIE,
Superintendent, P. & O. S. N. Co
E. SCARPA,
Agent, Austrian Lloyd's S. N. Co.
T. HENKIYAMA,
Acting Manager, Nippon Yusen Kaisha.
* * *
Agent, Rubattino S. N. Co.

Appendix E.

Reduction in the Rates of Freight on Cotton from Bombay to China and Japan.

Millowners' Association,
Bombay, 15*th January* 1903.

The SUPERINTENDENT, P. & O. S. N. COMPANY,
The AGENT, AUSTRIAN LLOYD'S S. N. COMPANY.
" RUBATTINO S. N. COMPANY.
The MANAGER, NIPPON YUSEN KAISHA.

Dear Sirs,

The attention of the Committee of the Bombay Millowners' Association has been drawn to the fact that since July last the freight on cotton from Bombay to Japan has been reduced from Rs. 12 nett to Rs. 10/4 per ton. I am directed to represent to you that such a reduction, not accompanied by a similar abatement of freight on twist for China, places shippers of the latter article at a serious disadvantage in their competition with the Japanese spinners. The converse of this principle of parity was touched upon by this Association in the second para. of their letter to you, dated the 8th December 1900. At that time there was question of a virtual increase in yarn freights to China unaccompanied by a corresponding increase in cotton freights to Japan. In your reply you appeared, while recognising the principle, to infer that the Association would not object to an enhancement of twist freight for China if a corresponding increase were made in cotton freight for Japan. The Association, in their letter of the 5th March, therefore pointed out that if freight both on twist for China and on cotton for Japan were raised, the Bombay spinners would still suffer in their competition with the China mills. Conversely such a one-sided reduction as is now in question places them at a disadvantage as compared with the Japanese mills.

You are necessarily aware of the extreme difficulty that has attended the yarn business with China in the face of the fall in silver. Indeed the injury to the trade arising from this cause was the subject of special mention in the recent speech of the Chairman of the P. &. O. Company in London. My Committee submit therefore that their interests might reasonably have received from your Companies such consideration as would have been involved in the maintenance of the principle of parity so recently affirmed by you, and in the granting of such a reduction of freight for China as the general decline in freight rates would independently have warranted.

I am therefore to enquire whether your Companies are prepared to make a reduction of Rs. 1-12-0 per ton in the freight rate for twist to China, and to make such reduction retrospective to last July, so that Bombay shippers may be in a position to recover some of the ground they have lost during the six months in which the disparity of rates has existed.

I am, Dear Sirs,
Yours faithfully,
FREDERICK NOEL-PATON,
Secretary.

P. & O. Steam Navigation Company,
Bombay, 16*th January* 1903.

The SECRETARY,
Bombay Millowners' Association,
Bombay.

Dear Sir,

We beg to acknowledge the receipt of your letter of the 15th instant with reference to the rate of freight on yarn to China.

The matter is receiving our close attention, and we hope shortly to be able to give you a definite reply to your proposal.

We are, Dear Sir,
Yours faithfully,
FRANK RITCHIE,
Superintendent, P. & O. S. N. Co.
E. SCARPA,
Agent, Austrian Lloyd's S. N. Co.
* * *
Agent, Rubattino S. N. Co.
T. KUSUMOTO,
Manager, Nippon Yusen Kaisha.

P. & O. Steam Navigation Company,
Bombay, 26*th January* 1903.

The SECRETARY,
Bombay Millowners' Association,
Bombay.

Dear Sir,

With further reference to your letter of the 15th instant, we now beg to state that the question of a modification in rates of freight to China has received our very careful consideration.

We have, as you observe, been necessarily aware of the difficulty that has of late attended the yarn trade to China, and it is a condition of affairs which we naturally extremely regret, inasmuch as unless full and regular employment is given to the steamers which are appointed

to serve the trade, the business, at present rates and rebates, assumes an unremunerative character. We have not failed to share in the depression, as a number of our vessels during recent months have been forced to leave with vacant space or even to remain idle.

We are, however, anxious to forward by any reasonable means in our power the interests of the spinning industry of Bombay with which we have so long been associated ; and we have, after careful consideration, come to the conclusion that this can best be achieved by a reduction of Rs. 2 per ton in the gross rate on yarn to Shanghai on engagements made subsequent to this date. We regret that we cannot see our way to making this retrospective, or to reducing the already very low Hongkong figure. Rebates and the rate on cotton to Shanghai will remain unaltered.

We trust that the Association will agree that this arrangement, which involves a very considerable sum, is a fair and satisfactory solution of the question.

We are, Dear Sir,
Yours faithfully,
FANK RITCHIE,
Superintendent, P. & O. S. N. Co.
E. SCARPA,
Agent, Austrian Lloyd's S. N. Co.
* * *
Agent, Rubattino S. N. Co.
T. KUSUMOTO,
Manager, Nippon Yusen Kaisha.

MILLOWNERS' ASSOCIATION,
BOMBAY, 16*th February* 1903.

THE SUPERINTENDENT, P. & O. S. N. COMPANY,
THE AGENT, AUSTRIAN LLOYD'S S. N. COMPANY,
„ RUBATTINO S. N. COMPANY,
„ NIPPON YUSEN KAISHA.

DEAR SIRS,

I am directed by the Committee of the Bombay Millowners' Association to acknowledge the receipt of your letter of the 26th January 1903, relating to the rates of freight from Bombay charged by your Lines on twist for China and on cotton for Japan.

2. My Committee note with satisfaction that you are prepared to concede Rs. 2 per ton in the gross rate on yarn to Shanghai on engagements made subsequent to the date of your letter, but they are disappointed to find that you decline to make this concession retrospective, and refuse it altogether in respect of shipments to Hongkong. My Committee believe that they can show good reason why your decisions in these latter respects should be reconsidered, and they direct me to put before you the following facts.

3. Firstly, as regards twist for Hongkong :—The nett rate for that port is Rs. 10-8 per ton while cotton for Kobe pays only Rs. 10 per ton. It is understood that the difference between these two rates is maintained in consideration of the loss or wastage of cotton in process of manufacture, and therefore reposes on the assumption that a ton of twist and a ton of cotton contain approximately equal weights of material. But this is not so. Four bales of cotton contain

Two candies or	1,568 lbs.
Less wastage 16 per cent., though this is an extreme estimate ...	251 „
Yielding twist to the weight of	1,317 lbs.

On this Rs. 10 in freight is paid, while Rs. 10-8 is paid on 2¼ bales of yarn containing only 1,100 lbs. If the principle of a parity of charge between cotton and yarn, as already recognised, is to be even roughly observed, either the 1,317 lbs. of clean cotton should pay Rs. 12-8 or the 1,100 lbs. of twist should pay only Rs. 8-6.

4. In other words the Japanese spinner, as against the Bombay spinner, has at present, in respect of freight, an advantage of some 20 per cent., and my Committee think you will recognise that under present conditions such an advantage is and must be decisive. It is hoped, therefore, that you will see your way to making in the rates to Hongkong such a reduction as will equalise the position, and that, in consideration of the grave injury done to the trade by such a disparity of rates operating since last July, you will even now arrange to make a proportionate refund in respect of shipments since that date.

5. I am to say that the percentage of wastage, 16 per cent. as above, is accepted for the purposes of this calculation, simply because the Committee are told that your Companies have been accustomed to assume that figure. But I am to add that in their opinion it is misleading, firstly, because the actual loss in weight seldom amounts to 16 per cent., and, secondly, because much of the loss in weight is represented by offals which are sold by the Japanese spinner after separation from the cotton.

I am, Dear Sir,
Yours faithfully,
FREDERICK NOEL-PATON,
Secretary.

P. & O. STEAM NAVIGATION COMPANY,
BOMBAY, 19*th February* 1903.

THE SECRETARY,
BOMBAY MILLOWNERS' ASSOCIATION,
BOMBAY.

DEAR SIR,

We beg to acknowledge the receipt of your letter of the 16th instant, which has received our very careful consideration.

We understand that at present nett rates (which are Rs. 10-8 on yarn to Hongkong and Rs. 10-4, not Rs. 10 as stated by you on cotton to Japan) you contend that the Bombay spinner is placed at a disadvantage, and that his Japanese competitor is unduly favoured. The freight on yarn to Shanghai having been reduced, and shipments of that article from Bombay to Japan having entirely ceased for some years, the only conclusion at which we can arrive is that the competition to which you refer is in the Hongkong and Southern China Markets. We have perused with interest the figures you put before us, but note with some surprise that you entirely ignore the fact, while arguing that the cotton and yarn rates should be placed on a parity, that the manufactured article from Japan has to pay a freight thence to Hongkong and other southern ports of over Rs. 7 per ton.

It is true, of course, that Hongkong yarn has to also pay freight to out-ports, but the difference in the total rate from Bombay to those places and that on the cotton which has been manufactured into yarn in Japan and thence re-shipped, will be found to be considerably in favor of the Indian article. Moreover our information is to the effect that of the total export from Japan to China but a very small proportion has ever found its way to Southern China.

Viewed in this light we venture to think that you will on further consideration perceive that the Japan spinner is not, under present circumstances, given an undue advantage.

We are, Dear Sir,
Yours faithfully,
FRANK RITCHIE,
Superintendent, P. & O. S. N. Co.
E. SCARPA,
Agent, Austrian Lloyd's S. N. Co.

* * * *

Agent, Rubattino S. N. Co.
T. KUSUMOTO,
Manager, Nippon Yusen Kaisha.

P. & O. STEAM NAVIGATION COMPANY,
BOMBAY, *2nd March* 1903.

THE SECRETARY,
BOMBAY MILLOWNERS' ASSOCIATION,
BOMBAY.

DEAR SIR,

Referring to our letter of the 19th ultimo, we beg to state that advices just received from Japan are to the effect that the rate on yarn thence to Hongkong has now been reduced and works out rather less than Rs. 4 per ton. This, while being a considerable reduction from the quotation given in our letter above referred to, does not however alter our contention that the export of Japan yarn to China is not being favoured by the rate of freight fixed on the Bombay product from this port to China.

We are, Dear Sir,
Yours faithfully,
FRANK RITCHIE,
Superintendent, P. & O. S. N. Co.
E. SCARPA,
Agent, Austrian Lloyd's S. N. Co.
* * * *
Agent, Rubattino S. N. Co.
T. KUSUMOTO,
Manager, Nippon Yusen Kaisha.

MILLOWNERS' ASSOCIATION,
BOMBAY, 11*th March* 1903.

THE SUPERINTENDENT, P. & O. S. N. COMPANY,
THE AGENT, AUSTRIAN LLOYD'S S. N. COMPANY,
„ RUBATTINO S. N. COMPANY,
THE MANAGER, NIPPON YUSEN KAISHA,
BOMBAY.

DEAR SIRS,

I am directed by the Committee of the Bombay Millowners' Association to acknowledge the receipt of your letters of the 19th February and 2nd March, regarding the rates of freight on yarn for China.

The Committee note with satisfaction that you do not re-affirm the rate of "over Rs. 7 per ton" stated in your first letter to be the freight on yarn from Japan to Hongkong and Southern Ports, but say that "it has now been reduced and works out rather less than Rs. 4 per ton." As a matter of fact the Committee's advices are that the actual rate is 83 yen Cents per bale. Taking 2½ bales per ton, this works out about Rs. 3 per ton, Japanese yarn bales being larger than Bombay bales in measurement. The Committee would therefore be greatly disappointed to find that you could not see your way to making an equivalent reduction in the rates to Hongkong; and, being confident that you do not desire to ignore a circumstance that must ultimately lead to a reduction of the shipments of yarns by your Lines from Bombay, they direct me to urge that you will again take the matter into your consideration with a view to placing them on the same competitive footing as formerly, and this not only prospectively but retrospectively.

I am, Dear Sirs,
Yours faithfully,
FREDERICK NOEL-PATON,
Secretary.

Appendix F.

Keeping Fires in Boilers at Night.

No. B. I. / 3768 OF 1902.

BOMBAY COLLECTOR'S OFFICE,
STEAM BOILER DEPARTMENT,
10th September 1902.

FROM

THE COLLECTOR OF BOMBAY,
BOMBAY,

To

THE SECRETARY,
BOMBAY MILLOWNERS' ASSOCIATION,
BOMBAY.

SIR,

It has been reported to me that several mills in Bombay are in the habit of keeping fires in their boilers all night and the boilers under steam pressure. The practice is clearly dangerous in the absence of an Engineer, and is moreover contrary to the provisions of Section 6 (1) (*d*) of the Bombay Boiler Inspection Act of 1891. I have the honour, therefore, to enquire whether the Millowners' Association is prepared to effect the discontinuance of the practice *suo motu*.

I have, &c.,
E. GRAY,
Collector of Bombay.

No. B. I. / 3805 OF 1902.

BOMBAY COLLECTOR'S OFFICE,
STEAM BOILER DEPARTMENT,
12th September 1902.

FROM

THE COLLECTOR OF BOMBAY,
BOMBAY,

To

THE SECRETARY,
BOMBAY MILLOWNERS' ASSOCIATION,
BOMBAY.

SIR,

I have the honour to state that I wrote a few days ago to you asking if the Millowners' Association could take steps to ensure the discontinuance of the practice of keeping fires in boilers with the boilers under pressure at night in the absence of the Engineers, who, under the Steam Boiler Inspection Act, are expected to be in charge. Since writing I have been informed that the Insurance Agents are likely to create difficulties. Would you therefore be good enough to favour us with the views of the Millowners' Association on the matter, and inform us what the difficulties referred to are, and if they are in your opinion insuperable.

I have, &c.,
E. GRAY,
Collector of Bombay.

MILLOWNERS' ASSOCIATION,
26th September 1902.

THE COLLECTOR OF BOMBAY.

SIR,

Under the instructions of the Committee of the Bombay Millowners' Association, I have the honour to inform you that an effort has been made to hold a Special Meeting of the Committee for the discussion of your letters Nos. B. I. 3768 and B. I. 3805 of the 10th and 12th instant, about the keeping of fires in mill boilers at night in the absence of an Engineer; but it has been found impossible to get all members together before the 3rd proximo, when the regular monthly meeting falls to be held. The Committee hope to deal with the matter on that date. Meantime I am directed to beg that you will be good enough to furnish them with information as to whether it would meet your views if the day Engineer resided within a radius of half a mile, and existing night arrangements remained otherwise unchanged. If not, they would be glad to know what arrangements, short of the appointment of a special Engineer, would be considered satisfactory. With these facts before them the Committee would be more able to arrive at a definite view of the question.

I have, &c.,
FREDERICK NOEL-PATON,
Secretary.

No. $\frac{\text{B. I.}}{4062}$ OF 1902.

BOMBAY COLLECTOR'S OFFICE,
STEAM BOILER DEPARTMENT,
3rd October 1902.

FROM

THE COLLECTOR OF BOMBAY,
BOMBAY,

To

THE SECRETARY,
BOMBAY MILLOWNERS' ASSOCIATION,
BOMBAY.

SIR,

With reference to your letter, dated the 26th ultimo, I have the honour to state that the Steam Boiler Commission has ruled that an Engineer cannot be held to be in charge of boilers unless present and on the alert. An Engineer who had worked during the day could not, in my opinion, satisfy these conditions for boilers under steam at night, and I do not think that anything short of a 3rd class Engineer in charge at night, and when the boilers are being raised to working pressure in the morning, can satisfy the requirements of the Act.

I have, &c.,
J. S. HEANEY,
for Collector of Bombay.

MILLOWNERS' ASSOCIATION,
BOMBAY, *16th October* 1902.

THE COLLECTOR OF BOMBAY,
BOMBAY.

SIR,

Since the receipt of your letter No. B. I. 4062, dated 3rd instant, on the subject of the keeping of steam in mill boilers at night in the absence of the Engineer in charge, the matter has for convenience been referred to a Special Committee with power to go more fully into the matter,

and report as to whether any arrangement can be come to, whereby the industry might be spared the expense of employing Engineers for work which in practice has been found to be performed satisfactorily and without accident by the serang or head fireman.

2. The Special Committee met yesterday and, under their instructions, I have the honour to submit that in their opinion an experienced serang or head fireman is commonly a better qualified and more reliable person for the mere caretaking of boilers than even a 3rd class Engineer, while the latter is subject to the additional disadvantage that he would probably require the services of a subordinate to do the actual work of firing should occasion arise. For this reason they feel that they would consider the security of their property to be complete at night so long as the Engineer resided within a half mile radius of the mill, and the serang or head fireman actually in charge of the boilers was one holding a certificate of experience and competency from that Engineer.

3. In cases where the Engineer does not reside within a half mile radius of the mill they consider that no objection could be raised by Millowners to the requirement that a 3rd class Engineer should be in actual charge.

4. I am to beg that you will favour the Special Committee with information as to whether, in view of the merely technical sense in which the boilers can be said to be "working" at night and the actual competency of experienced serangs or head firemen for the work to be contemplated, you would not be prepared to accept the presence of such experienced serangs or head firemen together with the residence of the Engineer within a half mile radius as fulfilling the purposes of the Act.

I have, &c.,
FREDERICK NOEL-PATON,
Secretary.

No. $\frac{B.I.}{491}$ OF 1903.

BOMBAY COLLECTOR'S OFFICE,
STEAM BOILER DEPARTMENT,
4th February 1903.

FROM

THE COLLECTOR OF BOMBAY,
BOMBAY

To

THE SECRETARY,
BOMBAY MILLOWNERS' ASSOCIATION,
BOMBAY,

SIR,

The keeping of steam in mill boilers at night in the absence of the Engineer-in-Charge.

I have honour to address you on the subject noted in the margin.

2. I note that, in your letter, dated 16th October 1902, you admit that in cases where the Engineer does not reside within a half mile radius no objection could be raised by a millowner to the requirement that a third class Engineer should be in actual charge.

3. As regards your query as to whether I am prepared to accept the presence of an experienced serang or head fireman, I have the honour to forward an extract from the minutes of a meeting of the Boiler Commission, to whom this matter has been referred to for opinion, and to request that you will let me have the views of your Association as regards the recommendation of the Commission.

4. I would at the same time point out to your Association that however differently the word "working" may be interpreted, it is beyond doubt that the Act requires the presence of a fully qualified Engineer when the pressure is being raised in the morning. In practice, however, it is frequently the case that the Engineer does not come till work has started. I would therefore call the attention of your Association to the irregularity, and to request them to take such steps as are necessary to ensure a discontinuance of this practice.

I have, &c.,
M. M. S. GUBBAY,
for Collector of Bombay.

Extract from the Minutes of a Meeting of the Bombay Boiler Commission held on 21st January 1903.

"* * * * * the Commission are of opinion that while an Engineer is physically capable of being in charge for 24 consecutive hours *on an emergency*, he should not be held to be capable for a longer period; and hence in the case of boilers working for more than 24 consecutive hours, they consider that 16 hours is about as long as he should be asked to work, and a "Relieving" Engineer ought to be provided for the remainder of the 24 hours. This "Relieving" Engineer, while being a certificated Engineer, need not in the Commission's opinion necessarily be of the same grade as the "Engineer-in-charge," *e.g.*, if the required "Engineer-in-charge" is a first class Engineer, the "Relieving" Engineer should hold a second class certificate, and if the "Engineer-in-charge" is a second class Engineer, the "Relieving" Engineer should hold a third class certificate; if however the "Engineer-in-charge" is a third class Engineer, the "Relieving" Engineer should hold a third class certificate.

One Engineer should always be within the 1,000 feet limit * * * * *.

(True Extract.)
M. M. S. GUBBAY,
for Collector of Bombay.

4th February 1903.

MILLOWNERS' ASSOCIATION,
BOMBAY, *11th March* 1903.

THE COLLECTOR OF BOMBAY,
BOMBAY.

SIR,

Under the instructions of the Committee of the Bombay Millowners' Association, I have the honour to acknowledge the receipt of your letter No. B. I.—491, dated the 4th February last, on the subject of the keeping of steam in mill boilers in the absence of the Engineer-in-charge. I have also to thank you for an extract from the minutes of a meeting of the Boiler Commission held on the 21st January 1903. I am to beg that you will favour this Association with some information as to the constitution and proceedings of the said Commission, or with a reference to the source from which such information could be obtained. In the absence of the information indicated, the Committee find it difficult to form any opinion as to whether the demonstrated efficiency of serangs and head firemen for the purpose in question was in the knowledge of the Commission. It does not clearly appear from your letter whether the Commission, when making their recommendations, had before them the representation of the Association as to the fitness of serangs and head firemen; nor does the text of the extract itself make any express reference to that representation.

Meantime, and in response to your request for an expression of the views of my Committee regarding the recommendations of the Boiler Commission, I am directed to say that the

Committee have knowledge of no facts showing serangs and head firemen to be insufficient for the purpose had in view. On the contrary they conceive that the best possible proof of their efficiency is to be found in the fact that this class of men has for so many years been employed for the purpose named, and this without any serious accident attributable to such employment. It is conceivable that the Commission had before them facts not known to the members of my Committee ; but, as practical millowners of long experience, they cannot help thinking this improbable; and they submit that it would be consistent with the practice observed in the United Kingdom, in America, and in other great industrial countries, that full weight should be given to the rarity of accidents in the past, and that no restriction should be placed on an industry unless it be shown that serious consequences resulted from the absence of such restriction. In order that no doubt may exist as to the extent of the burden which would be imposed on the local industry by the proposed interpretation of the rules, I am instructed to say that the employment of a certificated Engineer for the purpose in question will cost each mill at the very least Rs. 100 per mensem more than at present. There are eighty mills in Bombay alone, so that a total charge of Rs. 8,000 per mensem or Rs. 96,000 per annum will be imposed on the local mills without any good ground for that charge being known to the persons and Companies so mulcted. So far as my Committee can see, the only class likely to gain by the change will be that of the lower grades of certificated Engineers, and against their gain must be set the loss of the serangs and head firemen whom the Members of this Association believe to be, if anything, more reliable.

I have, &c.,
FREDERICK NOEL-PATON,
Secretary.

Appendix G.

Indian Limitation Act, 1877.

No. 5225.

JUDICIAL DEPARTMENT,
BOMBAY CASTLE, 15*th August* 1902.

FROM

A. S. A. WESTROPP, ESQ., I.C.S.,
UNDER-SECRETARY TO GOVERNMENT,
BOMBAY.

To

THE SECRETARY TO THE BOMBAY MILLOWNERS' ASSOCIATION.

SIR,

I am directed to forward to you the accompanying copy of a letter from the Government of India, Home Department, No. 2007, dated the 21st July 1902, relative to a proposal to amend the Indian Limitation Act, 1877 (XIV of 1877), and to state that the Governor in Council will be glad to receive an expression of the opinion of the Bombay Millowners' Association on the subject.

I have, &c.,
A. S. A. WESTROPP,
Under-Secretary to Government.

No. 2007.

JUDICIAL DEPARTMENT,

SIMLA, *the* 21*st July* 1902.

FROM

A. WILLIAMS, ESQ.,

DEPUTY SECRETARY TO THE GOVERNMENT OF INDIA.

To

THE SECRETARY TO THE GOVERNMENT OF BOMBAY.

SIR,

I am directed to forward a copy of a letter * from the Government of Bengal and its enclosures, in which the Calcutta Trades Association brings to notice the hardship caused to creditors by the operation of the law in respect of claims against the estates of deceased persons. The Association suggests that the interval between a debtor's death and the date of appointment of a legal representative of his estate should be excluded in computing the period prescribed by the Indian Limitation Act, 1877 (XV of 1877), and that the necessary provision should be added to section 13 of the Act. A representation similar to that of the Calcutta Trades Association has also been received from the Trades Association of Rangoon. The Government of Bengal asks that the matter may be taken into consideration when the Act is next amended, and before coming to a decision on the merits of this proposal the Government of India would be glad to be furnished with the view of the Governor in Council on the subject.

* No. 21-J.D., dated the 21st April 1902.

I have, &c.,

A. WILLIAMS,

Deputy Secretary to the Government of India.

No. 21-J.D., DATED DARJEELING, *the* 21*st April* 1902.

FROM

J. A. BOURDILLON, Esq., C.S.I.,

CHIEF SECRETARY TO THE GOVERNMENT OF BENGAL.

To

THE SECRETARY TO THE GOVERNMENT OF INDIA,

HOME DEPARTMENT.

I am directed to submit, for the favourable consideration of the Government of India, the accompanying copies of the marginally-noted letters from the Calcutta Trades Association regarding the Law of Limitation.

Letter No. 487, dated the 6th December 1901.
Letter, dated the 11th March 1902.

2. The Association represents the hardship caused to creditors by the operation of the law in respect of claims against the estates of deceased persons, and suggests that the interval between a debtor's death and the representation of his estate may be excluded in computing the period prescribed by the Limitation Act which limits proceedings for the recovery of debts due by the deceased.

3. I am to observe that it has been brought to the notice of this Government that there are instances in which the creditor, in the absence of any near relatives of a deceased debtor or of any ostensible owner of his assets, has found a difficulty in choosing the defendant to his action. And this difficulty is the greater in this country, as the laws of inheritance applicable to the people of different nationalities are very various. In cases where a debtor executed a will his estate would not be represented till somebody had obtained probate or letters of administration in respect of it. The proceedings for the grant of probates and letters of administration are generally summary, but sometimes they are hotly contested and very lengthy, and

when persons not in affluent circumstances die, their relations generally take a long time to determine whether it is worth their while to face the cost of the proceedings. Further, as Section 190 of the Indian Succession Act, which lays down that no right to any part of the property of a person who has died intestate can be established in any court of justice unless letters of administration have first been granted by a court of competent jurisdiction, does not apply to Hindus, Muhammadans or Buddhists, and there is no similar law applicable to these classes, there is no incentive to a Muhammadan or Hindu heir to take out letters of administration, the result being that, upon the death of a debtor, his legal representatives defer taking out administration as long as they can, and the creditor finds that his claim is barred by limitation.

4. The remedy suggested is to add the necessary provision to section 13 of the Indian Limitation Act. It is urged that if the suggested remedy is adopted, the creditor would have the benefit of the full period ordinarily allowed within which to sue for recovery of the debt after the same has fallen due, part of this period being during the life-time of the original debtor and the remainder of it during a time when the deceased debtor's estate is represented by an administrator. I am to suggest that the matter may be taken into consideration when the Indian Limitation Act is next amended.

No. 487, DATED CALCUTTA, *the 6th December* 1901.

FROM

THE SECRETARY TO THE CALCUTTA TRADES ASSOCIATION,

To

THE CHIEF SECRETARY TO THE GOVERNMENT OF BENGAL.

I am directed by the Committee of the Trades Association to invite attention to the following remarks regarding the Law of Limitation in its application to claims against the estates of deceased persons.

2. The particular point which the Committee have had under consideration is whether debts, which are not barred by the Limitation Act at the date of a person's death, are admissible when representation to an estate is deferred from any cause.

3. The claims of members of the Association, I would observe, are ordinarily for the price of goods sold and delivered, and the right to sue, when no fixed period of credit is agreed upon, accrues on non-payment of the price on delivery.

4. The Committee have lately been informed by their solicitors that in cases of the above description, limitation does not cease to run during the period between a debtor's death and that at which representation to his estate is obtained; that in fact, when limitation has once commenced to run it continues to run. Consequently, when the three years' limitation, from date of the accrual of the right to sue, expires, the remedy for the recovery of a claim from the legal representative of an estate is barred, and it then rests with the representative whether or not he will admit the claim.

5. It has, I should add, been held to be no answer to a plea of limitation by a legal representative that after the cause of action accrued and limitation had begun to run, the debtor within the period of limitation died, and that, by reason of litigation as to the right of probate, an executor was not appointed until after the period of limitation had expired.

6. The Committee beg leave to point out that the operation of the law in the manner above stated, in respect of claims of the nature specified in paragraph 3, is attended with serious loss to creditors, the hardship of whose position becomes the greater in cases where claims which were perfectly good and sustainable in a person's life-time, *and would have been paid*, are, on his death, thrown out.

7. The Committee are aware that it is open to a creditor, if his claim is about to be barred to himself apply for letters of administration, but as this course would in many cases entail much trouble, worry, and perhaps litigation, creditors can hardly, the Committee submit, be blamed if they do not adopt it.

8. The Committee would now call attention to another aspect of this question of the administration of estates. In the foregoing remarks they have dealt with the position of creditors of an estate whose right to sue accrues *before* a debtor's death; the law, however, deals differently with the creditors of an estate whose right of suit accrues *after* a debtor's death, for then the period of limitation would be computed *from the time when there is a legal representative* against whom a suit may be instituted.

9. This latter position is one in which all creditors of the estates of deceased persons may rightfully be placed, as the Committee are of opinion that there should be absolute equality for all claimants in respect of the *initial step of registration of claims*. At present the law not only favours one creditor, simply because of the accident that his right to sue accrued *after* his debtor's death, but protects him for an indefinite period of time, *viz.*, until there is a legal representative of the debtor's estate; the advantage thus gained is very great and only serves to intensify the position of other creditors.

10. The Committee would now respectfully solicit that the interval between a person's death and the representation of his estate may be excluded in computing the period of limitation prescribed by the Limitation Act. The Act, as you are aware, allows the time during which a person is absent from India to be excluded from computation, and if a similar concession could be made in respect of the time a deceased person's estate remains unrepresented, it would be greatly appreciated by all classes of the business community in India.

Requesting that you will be good enough to submit this letter to His Honour the Lieutenant-Governor for his consideration.

DATED CALCUTTA, *the 11th March* 1902.

FROM

THE SECRETARY TO THE CALCUTTA TRADES ASSOCIATION,

To

THE UNDER-SECRETARY TO THE GOVERNMENT OF BENGAL,

JUDICIAL DEPARTMENT.

I have the honour to acknowledge the receipt of your letter No. 192-J., dated the 10th January, enquiring whether the Association is aware of cases in which the operation of the Law of Limitation in connection with the estates of deceased persons has been attended with hardship to creditors.

2. In reply, I am desired to state that it was in consequence of the Limitation Act operating to the detriment of creditors in a case which came before the Association that the representation contained in my letter to the Chief Secretary to Government was made. The debtor in that case died at Raniganj on the 2nd July 1897, and the notice calling for claims against his estate was advertised by the Attorney for the Administrator on the 29th July 1901, or a little more than four years after the death of the debtor.

In response to the notice, certain members of the Association submitted their claims for registration, but were informed that the same could not be admitted, as they were barred by limitation; and, further, that the assets would be paid to the person "legally entitled" thereto. These claims, I am to add, were not barred by the Limitation Act at the time of the debtor's death.

4. With reference to your further enquiry whether it has been found that a delay of one or two years is allowed to take place before the appointment of a legal representative to an estate, I am to point out that there is nothing in the law requiring an estate to be represented as a matter of course within any particular period from a testator's or intestate's death; that representation

is applied for only as necessity arises for dealing with the assets of an estate; and that in the case of an insolvent estate the application may be indefinitely postponed, for in such cases it is not to the interest of the next-of-kin or beneficiaries to take upon themselves the burden of the administration. It has been suggested to the Association that if the records of the High Court were examined, many cases would be found in which the application for the grant has been made after the lapse of one or two years and even longer periods.

MILLOWNERS' ASSOCIATION,
BOMBAY, *3rd October* 1902.

A. S. A. WESTROPP, ESQ., I.C.S.,
UNDER-SECRETARY TO GOVERNMENT OF BOMBAY
IN THE JUDICIAL DEPARTMENT.

SIR,

Under the instructions of the Committee of the Bombay Millowners' Association, I have the honour to acknowledge the receipt of your letter, No. 5225, dated the 15th August last, forwarding a copy of a letter from the Government of India relative to a proposal to amend the Indian Limitation Act to the effect that the interval between a debtor's death and the date of appointment of a legal representative of his estate should be excluded in computing the period prescribed by the said Act, and that the necessary provision should be added to Section 12 of the Act. I am to say that the matter has had the careful consideration of the Committee and that they unanimously approve of the proposed amendment.

I have, &c.,
FREDERICK NOEL-PATON,
Secretary.

Appendix H.

Chinese Import Duties on Yarns.

No. 1401—S.R.

GOVERNMENT OF INDIA,
FINANCE AND COMMERCE DEPARTMENT,
CALCUTTA, *7th March* 1902.

To

THE SECRETARY TO THE MILLOWNERS' ASSOCIATION,
BOMBAY.

SIR,

I am directed to forward a copy of a letter, dated the 1st February 1902, from Sir James Mackay to the address of the Secretary to the Government of India, Department of Revenue and Agriculture, regarding the rates of customs duty it is proposed to levy on cotton yarns imported into China.

2. I am to request that the Government of India may be favoured with any remarks which the Association may wish to offer on the subject.

I have, &c.,
R. A. MANT,
Under-Secretary to the Government of India.

3A, PEKING ROAD,
SHANGHAI, *February 1st*, 1902.

SIR,

In view of the great importance to India of the export trade in cotton yarns from that country to China, I have the honour to inform you that in the Draft of the New Chinese Import Tariff prepared in London by Sir Alfred Bateman of the Board of Trade, and Mr.

Alfred on the basis of an effective 5 per cent. *ad valorem*, it is proposed to levy the following duties on cotton yarns :—

	Hk. taels.	Mace.	Canda-reens.	Cash.
Cotton yarn.....Single No. 14 and under per pical	1	0	0	0
„ over 14 and up to 24 „	1	2	5	0
„ over No. 24 „	1	5	0	0
Doubled, trebled, and fourfold „	0	2	5	0

over above rates.

On the other hand, the Shanghai Branch of the China Association consider that the valuations on which the above duties are based are too high, and are in favour of a duty of nine mace, five candareens per pical on cotton yarns, grey or bleached, single or otherwise, and an *ad valorem* duty of 5 per cent. on dyed, mercerized or gassed yarns.

I have already transmitted the views of the Shanghai Branch of the China Association to His Majesty's Secretary of State for Foreign Affairs, but I should be glad to receive any observations which the Government of India may wish to offer upon the matter.

I have, &c.,

JAS. L. MACKAY.

To

THE SECRETARY TO THE GOVERNMENT OF INDIA,
Department of Revenue, Agriculture and Commerce,
Calcutta.

MILLOWNERS' ASSOCIATION,
BOMBAY, *5th April* 1902.

THE UNDER-SECRETARY TO THE GOVERNMENT OF INDIA,
FINANCE AND COMMERCE DEPARTMENT,
CALCUTTA.

SIR,

Under the instructions of the Committee of the Bombay Millowners' Association, I have the honour to acknowledge the receipt of your letter, No. 1401 S. R., dated the 7th March 1902, covering copy of a letter from Sir James Mackay, regarding the various recommendations made for the assessment of Import duty on cotton yarns imported into China.

2. The matter has been carefully considered by the Committee, and I am to say that they support the principle of the recommendation made by the Shanghai Branch of the China Association, in favour of a duty of 9 mace, five candareens per pical on cotton yarns, grey or bleached, single or otherwise, and an *ad valorem* duty of 5 per cent. on dyed, mercerized or gassed yarns.

3. I am to add that since the bulk of the yarns imported into China from India are of lower counts and value than those from Japan and other countries, they consider that yarns from India ought to be assessed at the average value of such coarser yarns.

I have, &c.,

FREDERICK NOEL-PATON,
Secretary.

Telegram from Government of India to the Bombay Millowners' Association, dated 19th May 1903 : —

Following received from Sir James Mackay, Shanghai. *Begins*. Your letter No. 2166 of April 22. After considerable discussion London have proposed and China Association here have agreed following rates for Cotton Yarns single No. 14 and under nine mace ; over No. 14 and up to No. 24 one tael ; over No. 24 one tael, two mace, five candareens ; doubled trebled and fourfold two mace five candareens over above rates. Will these rates be acceptable to you. Please reply Monday. Discussion with Chinese takes place Tuesday Mackay. *Ends*. Please reply to-day if possible.

Telegram from Bombay Millowners' Association, dated 20th May 1902, to the Secretary to the Government of India, Department of Finance and Commerce :—

Your telegram 19th instant. Millowners' Association in special meeting recommend consideration for Indian low count yarns and suggest the basis of Duty as under. Cotton yarns single tens and under eight mace 3⅓ candareens. Over tens and inclusive of sixteens nine mace. Over sixteens and inclusive of twenty-fours one tael. Over twenty-fours 1¼ taels. Doubled, trebled and fourfold two mace five candareens over above rates for single yarn.

FREDERICK NOEL-PATON,

20th May 1902. Secretary, Millowners' Association.

No. 4783—S. R.

GOVERNMENT OF INDIA,

FINANCE AND COMMERCE DEPARTMENT,

SIMLA, *the 5th September* 1902.

READ—Letter from Sir J. L. Mackay, His Britannic Majesty's Special Commissioner for the Revision of the British Treaty of Commerce with China, Shanghai, dated the 31st July 1902.

ORDERED that a copy of the letter be forwarded to the Bengal, Bombay, Madras, Rangoon, Karachi and Upper India Chambers of Commerce and to the Millowners' Association, Bombay.

R. A. MANT,

Under-Secretary to the Government of India.

SHANGHAI, *July 31st*, 1902.

To

THE SECRETARY TO THE GOVERNMENT OF INDIA,

FINANCE AND COMMERCE DEPARTMENT,

SIMLA.

SIR,

Referring to previous correspondence on the subject of the duty on cotton yarns in the New Chinese Import Tariff, I have now the honour to state that the duty has been fixed, with the approval of His Majesty's Government, at an uniform rate of 9½ mace per picul for all yarns, grey or bleached, single or otherwise, except dyed, gassed or mercerised which are to be dutiable at 5 per cent. *ad valorem*. The uniform rate of 9½ mace per picul was pressed for strongly by the Chinese Representatives who wished to avoid the inconvenience of being compelled to examine all shipments of yarn, and I understood from your letter of the 22nd April (Finance and Commerce Department, No. 2166) that this duty will also meet the views of the Government of India.

I have also the honour to state, with reference to my telegram of the 22nd May last, inquiring as to the average values of Gunny Bags and Hessians exported from India to China, and to your reply thereto of the 28th May, that the duties on Gunny Bags and Hessians in the new Chinese Import Tariff have been fixed as follows :—

		Tael.	Mace.	Candareens.	Cash.
Gunny Bags—					
New	per 1,000	4	2	5	0
Old	5 per cent. *ad valorem*.				
Hessians or	Per 1,000 yards.				
Burlaps, all weights		2	8	5	0

I trust these duties will prove satisfactory to merchants in India.

I have, &c.,

JAS. L. MACKAY.

NEW CHINESE IMPORT TARIFF.

The British Commercial Treaty with China.

The following is the correct version of the above Treaty, with Annexes, which was signed at Shanghai on Friday, 5th September, 1902 :—His Majesty the King of the United Kingdom of Great Britain and Ireland and of the British Dominions beyond the Seas, Emperor of India, and His Majesty the Emperor of China, having resolved to enter into negotiations with a view to carrying out the provision contained in Article XI of the Final Protocol signed at Peking on the 7th of September, 1901, under which the Chinese Government agreed to negotiate the amendments deemed useful by the Foreign Governments to the Treaties of Commerce and Navigation and other subjects concerning commercial relations with the object of facilitating them, have for that purpose named as their Plenipotentiaries, that is to say :—His Majesty the King of Great Britain and Ireland, His Majesty's Special Commissioner, Sir James Lyle Mackay, Knight Commander of the Most Eminent Order of the Indian Empire, a member of the Council of the Secretary of State for India, etc. And His Majesty the Emperor of China, the Imperial Commissioners, Lu Hai-huan, President of the Board of Public Works, etc., and Sheng Hsuan-huai, Junior Guardian of the Heir-Apparent, Senior Vice-President of the Board of Public Works, etc. Who having communicated to each other their respective Full Powers, and found them to be in a good and due form have agreed upon and concluded the following articles :—

Art. I.—Delay having occurred in the past in the issue of Drawback Certificates owing to the fact that those documents have to be dealt with by the Superintendent of Customs of as distance from the Customs Office, it is now agreed that Drawback Certificates shall hereafter in all cases be issued by the Imperial Maritime Customs within three weeks of the presentation to the Customs of the papers entitling the applicant to receive such Drawback Certificates. These Certificates shall be valid tender to the Customs Authorities in payment of any duty upon goods imported or exported (transit dues excepted) or shall in the case of Drawbacks on foreign goods re-exported abroad within three years from the date of importation be payable in cash without deduction by the Customs Bank at the place where the import duty was paid. But if in connexion with any application for a Drawback Certificate the Customs Authorities discover an attempt to defraud the revenue the applicant shall be liable to a fine not exceeding five times the amount of the duty whereof he attempted to defraud the Customs or to a confiscation of the goods.

Art. II.—China agrees to take the necessary steps to provide for a uniform national coinage which shall be legal tender in payment of all duties, taxes and other obligations throughout the Empire by British as well as Chinese subjects.

Art. III.—China agrees that the duties and likin combined levied on goods carried by junks from Hongkong to the Treaty Port in the Canton Province and *vice versâ*, shall together not be less than the duties charged by the Imperial Maritime Customs on similar goods carried by steamer.

Art. IV.—Whereas questions have arisen in the past concerning the right of Chinese subjects to invest money in non-Chinese enterprises and companies, and whereas it is a matter of common knowledge that large sums of Chinese capital are so invested, China hereby agrees to recognise the legality of all such investments, past, present and future. It being, moreover, of the utmost importance that all shareholders in a Joint Stock Company should stand on a footing of perfect equality as far as mutual obligations are concerned, China further agrees that Chinese subjects who have or may become shareholders in any British Joint Stock Company shall be held to have accepted, by the very act of becoming shareholders, the Charter of Incorporation or Memorandum and Articles of Association of such Company and regulations framed thereunder as interpreted by British Courts, and that Chinese companies shall enforce compliance therewith by such Chinese shareholders, if a suit to that effect be entered, provided always that their liability shall not be other or greater than that of British shareholders in the same Company. Similarly the British Government agree that British subjects investing in Chinese companies shall be under the same obligations as the Chinese shareholders in such companies. The foregoing shall not apply to cases which have already been before the Courts and been dismissed.

Art. V.—The Chinese Government undertake to remove within the next two years the artificial obstructions to navigation in the Canton River. The Chinese Government also agree to improve the accommodation for shipping in the harbour of Canton and to take the necessary steps to maintain that improvement, such work to be carried out by the Imperial Maritime Customs, and the cost thereof to be defrayed by a tax on goods landed and shipped by British and Chinese alike according to a scale to be arranged between the merchants and Customs. The Chinese Government are aware of the desirability of improving the navigability by steamer of the waterway between Ichange and Chungking, but are also fully aware that such improvement might involve heavy expense and would affect the interests of the population of the provinces of Szechuen, Hunam and Hupeh. It is, therefore, mutually agreed that until improvements can be carried out, steamship owners shall be allowed, subject to approval by the Imperial Maritime Customs, to erect, at their own expense, appliances for hauling through the rapids. Such appliances shall be at the disposal of all vessels, both steamers and junks, subject to regulations to be drawn up by the Imperial Maritime Customs. These appliances shall not obstruct the waterway or interfere with the free passage of junks. Signal stations and channel marks where and when necessary shall be erected by the Imperial Maritime Customs. Should any practical scheme be presented for improving the waterway and assisting navigation without injury to the local population or cost to the Chinese Government, it shall be considered by the latter in a friendly spirit.

Art. VI.—The Chinese Government agree to make arrangement to give increased facilities at the open ports for bonding and repacking merchandise in bond, and, on official representation being made by the British Authorities, to grant the privileges of a bonded warehouse to any warehouse which is established to the satisfaction of the Customs Authorities affords the necessary security to the revenue. Such warehouses will be subject to regulations, including a scale of fees according to commodities, distance from Custom House and hours of working, to be drawn up by the Customs' Authorities who will meet the convenience of merchants so far as is compatible with the protection of the revenue.

Art. VII.—Inasmuch as the British Government afford protection to Chinese trade marks against infringement, imitation, or colourable imitation by British subjects, the Chinese Government undertake to afford protection to British trade marks against infringement, imitation, or colourable imitation by Chinese subject. The Chinese Government further undertake that the Superintendent of Northern and of Southern trade shall establish offices within their respective jurisdictions under control of the Imperial Maritime Customs where foreign trade marks may be registered on payment of a reasonable fee.

Art. VIII.—Preamble: The Chinese Government recognising that the system of levying likin and other dues on goods at the place of production in transit and at destination impedes the free circulation of commodities and injures the interests of trade, hereby undertake to discard completely those means of raising revenue with the limitation mentioned in Section 8. The British Government in return consent to allow a surtax in excess of the tariff rates for the time being in force to be imposed on foreign goods imported by British subjects and a surtax in addition to the export duty on Chinese produce destined for export abroad or coastwise. It is clearly understood that, after likin barriers and other stations for taxing goods in transit have been removed, no attempt shall be made to revive them in any form or under any pretext whatsoever; that in no case shall the surtax on foreign imports exceed the equivalent of one and-a-half times the import duty leviable in terms of the Final Protocol signed by China and the Powers on the 7th day of September, 1901; that payment of the import duty and surtax shall secure for foreign imports, whether in the hands of Chinese or non-Chinese subjects, in original packages or otherwise, complete immunity from all other taxation, examination or delay; that the total amount of taxation leviable on native produce for export abroad shall, under no circumstances, exceed 7½ per cent. *ad valorem*. Keeping these fundamental principles steadily in view, the High Contracting Parties have agreed upon the following methods of procedure:—

Section 1.—The Chinese Government undertake that all barriers of whatsoever kind, collecting likin or such like dues or duties, shall be permanently abolished on all roads, railways,

and waterways in the Eighteen Provinces of China and the Three Eastern Provinces. This provision does not apply to the Native Custom Houses at present in existence on the seaboard or waterways, at Open Ports, on land routes, and on land frontiers of China.

Section 2.—The British Government agrees that foreign goods on importation, in addition to the effective 5 per cent. import duty as provided for in the Protocol of 1901, shall pay a special surtax equivalent to one and a-half times the said duty to compensate for the abolition of likin, or transit dues in lieu of likin, and of all other taxation on foreign goods, and in consideration of the other reforms provided for in this Article ; but this provision shall not impair the right of China to tax salt, native opium and native produce as provided for in Sections 3, 5, 6 and 8. The same amount of surtax shall be levied on goods imported into the Eighteen Provinces of China and the Three Eastern Provinces across the land frontiers as on goods entering China by sea.

Section 3.—All Native Custom Houses now existing, whether at the Open Ports, on the seaboard, on rivers, inland waterways, land routes or land frontiers, as enumerated in the Hu Pu and Kung Pu *Tse Li* (Regulations of the Board of Revenue and Works), and *Ta Ching Hui Tien* (Dynastic Institutes), may remain ; a list of the same, with their location, shall be furnished to the British Government for purposes of record. Wherever there are Imperial Maritime Custom Houses, or wherever such may be hereafter placed, Native Custom Houses may be also established; as well as at any points either on the seaboard or land frontiers.

The location of Native Custom Houses in the interior may be changed as the circumstances of trade seem to require, but any change must be communicated to the British Government, so that the list may be corrected ; the originally stated number of them shall not, however, be exceeded. Goods carried by junks or sailing-vessels trading to or from Open Ports shall not pay lower duties than the combined duties and surtax on similar cargo carried by steamers. Native produce, when transported from one place to another in the interior, shall, on arrival at the first Native Custom House after leaving the place of production, pay duty equivalent to the export surtax mentioned in Section 7. When this duty has been paid, a certificate shall be given which shall describe the nature of the goods weight, number of packages, etc., amount of duty paid and intended destination. The certificate, which shall be valid for a fixed period of not less than one year from date of payment of duty, shall free the goods from all taxation, examination, delay, or stoppage at any other Native Custom House passed *en route*. If the goods are taken to a place not in the foreign settlements or concession of an Open Port, for local use, they become there liable to the Consumption Tax described in Section 8. If the goods are shipped from an Open Port the certificate is to be accepted by the Custom House concerned in lieu of the Export Surtax mentioned in Section 7. Junks, boats, or carts shall not be subjected to any taxation beyond a small and reasonable charge paid periodically at a fixed annual rate. This does not exclude the right to levy as at present tonnage (China Chuan) and port dues (Chuan Liao) on junks.

Section 4.—Foreign opium duty and present likin—which latter will now become a surtax in lieu of likin—shall remain as provided for by existing treaties.

Section 5.—The British Government have no intention whatever of interfering with China's right to tax native opium, but it is essential to declare that in her arrangements for levying such taxation, China will not subject other goods to taxation, delay or stoppage. China is free to retain at important points on the borders of each province—either on land or water—offices for collecting duty on native opium where duties or contribution leviable shall be paid in one lump sum, which payment shall cover taxation of all kinds within that Province. Each cake of opium will have a stamp affixed as evidence of duty payment. Excise officers and police may be employed in connection with these offices ; but no barriers or other obstructions are to be erected, and the excise officers or police of these offices shall not stop or molest any other kinds of goods, or collect taxes thereon. A list of these offices shall be drawn up and communicated to the British Government for record.

Section 6.—Likin on salt is hereby abolished and the amount of said likin or other taxes and contributions shall be added to the salt duty, which shall be collected at place of production or at first station after entering the province where it is to be consumed. The Chinese Govern-

ment shall be at liberty to establish salt reporting offices at which boats conveying salt which is being moved under salt passes or certificates may be required to stop for purposes of examination and to have their certificates *vised*, but at such offices no likin or transit taxation shall be levied and no barriers or obstructions of any kind shall be erected.

Section 7.—The Chinese Government may recast the Export Tariff with specific duties as far as practicable, on a scale not exceeding five per cent. *ad valorem*; but existing export duties shall not be raised until at least six months' notice has been given.

In cases where existing export duties are above five per cent., they shall be reduced to not more than that rate. An additional special surtax of one-half the export duty payable for the time being, in lieu of internal taxation and likin, may be levied at time of export on goods exported either to foreign countries or coastwise. In the case of silk, whether hand or filature reeled, the total export duty shall not exceed a specific rate equivalent to not more than five per cent. *ad valorem*. Half of this specific duty may be levied at the first Native Custom House in the interior which the silk may pass and in such case a certificate shall be given as provided for in Section 3, and will be accepted by the Custom House concerned at place of export in lieu of half the export duty. Cocoons passing native Custom Houses shall be liable to no taxation whatever. Silk not exported but consumed in China is liable to the consumption tax mentioned and under conditions mentioned in Section 8.

Section 8.—The abolition of the likin system in China and the abandonment of all other kinds of internal taxation on foreign imports and on exports will diminish the revenue materially. The surtax on foreign imports and exports and on coastwise export is intended to compensate in a measure for this loss of revenue, but there remains the loss of likin revenue on internal trade to be met, and it is, therefore, agreed that the Chinese Government are at liberty to impose a Consumption Tax on articles of Chinese origin not intended for export. This tax shall be levied only at places of consumption and not on goods while in transit, and the Chinese Government solemnly undertake that the arrangements which they may make for its collection shall in no way interfere with foreign goods or with native goods for export, the fact of goods being of foreign origin shall of itself free them from all taxation, delay, or stoppage, after having passed the Custom House. Foreign goods which bear a similarity to native goods shall be furnished by the Custom House, if required by the owner, with a protective certificate for each package, on payment of import duty and surtax, to prevent the risk of any dispute in the interior. Native goods brought by junks to Open Ports if intended for local consumption—irrespective of the nationality of the owner of the goods—shall be reported at the Native Custom House only, where the consumption tax may be levied. China is at liberty to fix the amount of this (Consumption) Tax which may vary according to the nature of the merchandise concerned, that is to say, according as the articles are necessaries of life or luxuries; but it shall be levied at a uniform rate on goods of the same description no matter whether carried by junk, sailing-vessel, or steamer. As mentioned in Section 3, the Consumption Tax is not to be levied within foreign settlements or concessions.

Section 9.—An excise equivalent to double the import duty as laid down in the Protocol of 1901, is to be charged on all machine-made yarn and cloth manufactured in China, whether by foreigners at the Open Ports or by Chinese anywhere in China. A rebate of the import duty and two-thirds of the Import Surtax is to be given on raw cotton imported from foreign countries and of all duties including Consumption Tax, paid on Chinese raw cotton used in Mills in China. Chinese machine-made yarn or cloth having paid excise is to be free of export duty, Export Surtax, Coast Trade Duty, and Consumption Tax. This excise is to be collected through the Imperial Maritime Customs. The same principles and procedure are to be applied to all other products of foreign type turned out by machinery, whether by foreigners at the Open Ports or by Chinese anywhere in China. This stipulation is not to apply to the outturn of the Hanyang and Ta Yah Iron Works in Hupeh and other similar existing Government Works at present exempt from taxation, or to that of Arsenals, Government Dockyards, or establishments of that nature for Government purposes which may hereafter be erected.

Section 10.—A member or members of Imperial Maritime Customs Foreign Staff shall be selected by each of the Governor-General and Governors, and appointed in consultation with the Inspector-General of Imperial Maritime Customs to each province for duty in connection with

Native Customs affairs, Consumption Tax, Salt and Native Opium Taxes. These officers shall exercise an efficient supervision of the working of these departments, and in the event of their reporting any case of abuse, illegal exaction, obstruction to the movement of goods, or other cause of complaint the Governor-General or Governor concerned will take immediate steps to put an end to same.

Section 11.—Cases where illegal action as described in this article is complained of shall be promptly investigated by an officer of the Chinese Government of sufficiently high rank in conjunction with a British officer and an officer of the Imperial Maritime Customs, each of sufficient standing, and in the event of its being found by a majority of the investigating officers that the complaint is well founded and loss has been incurred, due compensation is to be at once paid from the Surtax funds through the Imperial Maritime Customs at the nearest Open Port. The High Provincial Officials are to be held responsible that the officer guilty of the illegal action shall be severely punished and removed from his post. If the complaint turns out to be without foundation, complainant shall be held responsible for the expenses of the investigation. His Britannic Majesty's Minister will have the right to demand investigation where from the evidence before him he is satisfied that illegal exactions or obstructions have occurred.

Section 12.—The Chinese Government agree to open to foreign trade, on the same footing as places opened to foreign trade by the Treaties of Nanking and Tientsin, the following places, namely :—

Ch'angsha in Hunan ;
Wanhsien in Szechuen ;
Nganking in Anhui ;
Waichow (Hui-chow) in Kuangtung ; and Kongmoon (Chiang-men) in Kuangtung.

Foreigners residing in these Open Ports are to observe the Municipal and Police Regulations on the same footing as Chinese residents, and they are not to be entitled to establish Municipalities and Police of their own within the limits of these Treaty Ports except with the consent of the Chinese authorities. If this article does not come into operation, the right to demand under it the opening of these ports with the exception of Kongmoon, which is provided for in Article 10, shall lapse.

Section 13.—Subject to the provisions of Section 14, the arrangements provided for in this Article are to come into force on 1st January, 1904. By that date all likin barriers shall be removed and officials employed in the collection of taxes and dues prohibited by this Article shall be removed from their posts.

Section 14.—The condition on which the Chinese Government enter into the present engagements is that all Powers entitled to most favoured nation treatment in China enter in the same engagements as Great Britain with regard to the payment of surtaxes and other obligations imposed by this Article on His Britannic Majesty's Government and subjects. The conditions on which His Britannic Majesty's Government enter into present engagement are :—

(1) That all Powers who are now or who may hereafter become entitled to most favoured nation treatment in China enter into the same engagements ; and (2) that their assent is neither directly nor indirectly made dependent on the granting by China of any political concession, or of any exclusive commercial concession.

Section 15.—Should the Powers entitled to most favoured nation treatment by China have failed to agree to enter into the engagements undertaken by Great Britain under this Article by the 1st January, 1904, then the provisions of the Article shall only come into force when all the Powers have signified their acceptance of these engagements.

Section 16.—When the abolition of likin and other forms of internal taxation on goods as provided for in this Article has been decided upon and sanctioned, an Imperial Edict shall be published in due form on yellow paper and circulated, setting forth the abolition of all likin taxation, likin barriers, and all descriptions of internal taxation on goods, except as provided for in this Article. The Edict shall state that the Provincial High Officials are responsible that any official disregarding the letter or spirit of its injunction shall be severely punished and removed from his post.

Art. IX.—The Chinese Government recognising that it is advantageous for the country to develop its mineral resources and that it is desirable to attract foreign as well as Chinese capital to embark in mining enterprise, agree within one year from the signing of this Treaty to initiate and conclude the revision of the existing Mining Regulations. China will with all expedition and earnestness go into the whole question of Mining Rules and selecting from the rules of Great Britain, India, and other countries, regulations which seem applicable to the condition of China, she will recast her present Mining Rules in such a way as, while promoting the interests of Chinese subjects and not injuring in any way the sovereign rights of China, shall offer no impediment to the attraction of foreign capital or place foreign capitalists at a greater disadvantage than they would be under generally accepted foreign regulations. Any Mining concession granted after the publication of these new Rules shall be subject to their provisions.

Art. X.—Whereas in the year 1898 the Inland Waters of China were opened to all such steam vessels, native or foreign, as might be especially registered for that trade at the Treaty Ports, and whereas the Regulations, dated 28th July, 1890, and Supplementary Rules, dated September, 1898, have been found in some respect inconvenient in working, it is now mutually agreed to amend them and to annex such new Rules to this Treaty. These rules shall remain in force until altered by mutual consent. It is further agreed that Kongmoon shall be opened as a Treaty Port, and that, in addition to the places named in special Article of the Burma Convention of 4th February 1897, British steamers shall be allowed to land or ship cargo and passengers, under the same regulations as apply to the "Ports of Call" on the Yangtze River, at the following "Ports of Call" Pau Tan Hau (Pai-tuk'ou), Lo Ting Hau (Lo-ting ko'u), and Do Sing (Tou-ch'eng); and to land or discharge passengers at the following ten passengers' landing stages on the West River:—Yung Ki (Jung-chi), Mah Ning (Maning), Kau Kong (Chiuchiang), Kulow (Ku-lau), Wing On (Yung-an), How lik (Houli), Luk Pu (Lu-Pu), Yuet Sing (Yueh-ch'eng), Luk To (Lu-tu) and Fung Chuen (Feng-ch'uan). We would, however, wish to point out that were the whole amount of the allocation due paid over to the Provinces, unnecessary expense would be incurred in the retransmission by them of such portions thereof as would have to be remitted to Peking in place of the contributions hitherto payable out of likin revenue. The amount, therefore, of the allocation due to the Provinces arranged between them and the Board of Revenue will be retained in the hands of the Maritime Customs, who will await the instructions of the Provinces in regard to the remittance of such portion thereof as may be necessary to fulfil their obligations and (on receipt of these instructions) will send forward the amount direct. The balance will be held to the order of the Provinces. In so far a likin is pledged to the service of the 1898 loan, a similar method of procedure will be adopted.

As you request that this correspondence be annexed to the Treaty we have the honour to state that we see no objection to this being done.

ANNEX C.

INLAND WATERS STEAM NAVIGATION.

ADDITIONAL RULES.

1. British steamship owners are at liberty to lease warehouses and jetties on the banks of waterways from Chinese subjects for a term not exceeding 25 years, with option of renewal on terms to be mutually arranged. In cases where British merchants are unable to secure warehouses and jetties from Chinese subjects on satisfactory terms, the local officials, after consultation with the Minister of Commerce, shall arrange to provide these on renewable lease as above-mentioned at current equitable rates.

2. Jetties shall only be erected in such position, that they will not obstruct the inland waterway or interfere with navigation, and with the sanction of the nearest Commissioner of Customs: such sanction, however, shall not be arbitrarily withheld.

3. British merchants shall pay taxes and contributions on these warehouses and jetties on the same footing as Chinese proprietors of similar properties in the neighbourhood. British merchants may only employ Chinese agents and staff to reside in warehouses so leased at places

touched at by steamers engaged in inland traffic to carry on their business ; but British merchants may visit these places from time to time to look after their affairs. The existing rights of Chinese jurisdiction over Chinese subjects shall not by reason of this clause be diminished or interfered with in any way.

4. Steam vessels navigating the inland waterways of China shall be responsible for loss caused to riparian proprietors by damage which they may do to the banks or works on them and for the loss which may be caused by such damage. In the event of China desiring to prohibit the use of some particular shallow waterways by launches because there is reason to fear that the use of it by them would be likely to injure the banks and cause damage to the adjoining country, the British authorities, when appealed to, shall, if satisfied of the validity of the objection, prohibit the use of that waterway by British launches, provided that Chinese launches are also prohibited from using it. Both Foreign and Chinese launches are prohibited from crossing dams and weirs at present in existence on inland waterways where they are likely to cause injury to such works, which would be detrimental to the water service of the local people.

5. The main object of the British Government in desiring to see the inland waterways of China opened to steam navigation being to afford facilities for the rapid transport of both foreign and native merchandise, they undertake to offer no impediment to the transfer to a Chinese company and the Chinese flag of any British steamer which may now or hereafter be employed on the inland waters of China, should the owner be willing to make the transfer. In event of a Chinese company registered under Chinese law being formed to run steamers on the inland waters of China, the fact of British subjects holding shares in such a company shall not entitle the steamers to fly the British flag.

6. Registered steamers and their tows are forbidden, just as junks have always been forbidden, to carry contraband goods. Infraction of this rule will entail the penalties prescribed in the Treaties for such an offence, and cancellation of the inland waters Navigation Certificate carried by the vessels, which will be prohibited from thereafter plying on inland waters.

7. As it is desirable that the people living inland should be disturbed as little as possible by the advent of steam vessels to which they are not accustomed, inland waters not hitherto frequented by steamers shall be opened as gradually as may be convenient to merchants and only as the owners of steamers may see prospect of remunerative trade.

In cases where it is intended to run steam vessels on waterways on which such vessels have not hitherto run, intimation shall be made to the Commissioners of Customs at the nearest open port, who shall report the matter to the Minister of Commerce. The latter in conjunction with the Governor-General or Governor of the province, after careful consideration of all the circumstances of the case, shall at once give their approval.

8. A registered steamer may ply within the waters of a port or from one open port or ports to another open port or ports, or from one open port or ports to places inland, and thence back to such port or ports. She may, on making due report to the Customs, land or ship passengers or cargo at any recognised places of trade passed in the course of the voyage ; but may not ply between inland places exclusively, except with the consent of the Chinese Government.

9. Any cargo and passenger boats may be towed by steamers. The helmsman and crew of any boat towed shall be Chinese. All boats, irrespective of ownership, must be registered before they can proceed inland.

10. These Rules are supplementary to the Inland Steam Navigation Regulation of July and September, 1898. The latter where untouched by the present Rules, remain in full force and effect ; but the present Rules hold in the case of such of the former Regulations as the present Rules affect. The present Rules and the Regulations of July and September 1898, to which they are supplementary, are provisional, and may be modified, as circumstances require, by mutual consent.

Done at Shanghai this fifth day of September in the year of Our Lord, 1902, corresponding with the Chinese date, the fourth day of the eighth moon of the twenty-eighth year of Kwang Hsu.

JAS. L. MACKAY.

ANNEX A—(2).

SHANGHAI, 18th August, 1902.

GENTLEMEN.—I have the honour to acknowledge the receipt of your despatch of the 14th instant, forwarding copy of a telegram from His Excellency Liu, Governor-General of the Liang Chiang, on the subject of Article II of the new Treaty, and in reply I have the honour to state that His Excellency's understanding of the Article is perfectly correct. I presume the Chinese Government will make arrangements for the coinage of a national silver coin of such weight and touch as may be decided upon by them. These coins will be made available to the public in return for a quantity of silver bullion of equivalent weight and fineness plus the usual mintage charge. The coins which will become the national coinage of China will be declared by the Chinese Government to be legal tender in payment of Customs duty and in discharge of obligations contracted in Haikwan taels, but only at their proportionate value to the Haikwan tael, whatever that may be.

I have the honour to be,
Gentlemen,
Your obedient Servant,
JAS. L. MACKAY.

Their Excellencies
LU HAI-HUAN and SHENG HSUNA-HUAI,
etc., etc., etc.,

ANNEX B—(1).

(Translation.)

Lu, President of the Board of Works;

Lheng, Junior Guardian of the Heir-Apparent, Vice-President of the Board of Works;

Imperial Chinese Commissioners for dealing with questions connected with the Commercial Treaties, to

Sir James L. Mackay, His Britannic Majesty's Special Commissioner.

SHANGHAI, 2nd September, 1902.

We have the honour to inform you that on the 22nd of August, we, in connection with the Governor-General of the Liang Chiang and the Hu-kuang Provinces, Their Excellencies Liu and Chang addressed the following telegraphic Memorial to the Throne:—

"Of the revenue of the different Provinces derived from likin of all kinds, a portion is appropriated for the service of the foreign loans, a portion for the Peking Government and the balance is reserved for the local expenditure of the Provinces concerned. In the negotiations now being conducted with Great Britain for the amendment of the Commercial Treaties, a mutual arrangement has been come to providing for the imposition of additional taxes, in compensation for the abolition of all kinds of likin and other imposts on goods, prohibited by Article VIII. After payment of the interest and sinking fund on the existing foreign loan to the extent to which likin is thereto pledged, these additional taxes shall be allocated to the various Provinces to make up deficiencies and replace revenue, in order that no hardship may be entailed on them. With a view to preserving the original intention underlying the proposal to increase the duties in compensation for the loss of revenue derived from likin and other imposts on goods, it is further stipulated that the surtaxes shall not be appropriated for other purposes, shall not form part of the Imperial Maritime Customs revenue proper, and shall in no case be pledged as security for any new foreign loan. It is therefore necessary to memorialise for the issue of an Edict, giving effect to the above stipulations and directing the Board of Revenue to find out what proportion of the provincial revenues derived from likin of all kinds, now about to be abolished, each Province has

hitherto had to remit, and what proportion it has been entitled to retain, so that, when the Article comes into operation, due apportionment may be made accordingly, thus providing the Provinces with funds available for local expenditure and displaying equitable and just treatment towards all."

On the 1st instant, an Imperial Decree "Let action, as requested, be taken," was issued, and we now do ourselves the honour reverently to transcribe the same for your information.

ANNEX B—(2).

SHANGHAI, *5th September*, 1902.

GENTLEMEN,—I have the honour to acknowledge the receipt of your despatch of the 2nd instant, forwarding the text of the Memorial and decree dealing with the disposal of the surtaxes. I understand that the surtaxes in addition to not being pledged for any new foreign loan are not to be pledged to, or held to be security for, liabilities already contracted by China except in so far as likin revenue has already been pledged to an existing loan. I also understand from the Memorial that the whole of the surtaxes provided by Article VIII of the New Treaty goes to the Provinces in proportion to be agreed upon between them and the Board of Revenue, but that out of these surtaxes each Province is obliged to remit to Peking the same contribution as that which it has hitherto remitted out of its likin collections, and that the Provinces also provide as hitherto out of these surtaxes funds whatever may be necessary for the service of the foreign loan to which likin is partly pledged. I hope your Excellencies will send me a reply to this despatch and that you will agree to this correspondence forming part of the Treaty as an Annex.

I have the honour to be,
Gentlemen,
Your obedient servant,
JAS. L. MACKAY.

Their Excellencies
LU HAI-HUAN and SHENG HSUAN-HEAI,
etc., etc., etc.

ANNEX B—(3).

(Translation.)

Lu, President of the Board of Works;

Sheng, Junior Guardian of the Heir-Apparent, Vice-President of the Board of Works;

Imperial Chinese Commissioners for dealing with questions connected with the Commercial Treaties, to Sir James L. Mackay, His Britannic Majesty's Special Commissioner.

SHANGHAI, *5th September*, 1902.

We have the honour to acknowledge the receipt of your communication of to-day's date with regard to the allocation of the surtax funds allotted to the Provinces, and to inform you that the views therein expressed are the same as our own.

Art. XI.—His Britannic Majesty's Government agree to the prohibition of the general importation of morphia into China, on condition, however, that the Chinese Government will allow of its importation, on payment of the Tariff import duty and under special permit, by duly qualified British medical practitioners and for the use of hospitals or by British chemists and druggists who shall only be permitted to sell it in small quantities and on receipt of a requisition signed by a duly qualified foreign medical practitioner. The special permits above referred to will be granted to an intending importer on his signing a bond before a British Consul guaranteeing the fulfilment of these conditions. Should an importer be found guilty before a British Consul of a breach of his bond, he will not be entitled to take out another permit. Any British subject importing morphia without a permit shall be liable to have such morphia confiscated. This Article will come into operation on all other Treaty Powers agreeing to its conditions, but any morphia actually shipped before that date will not be affected by this prohibition.

The Chinese Government on their side undertake to adopt measures at once, to prevent the manufacture of morphia in China.

Art. XII.—China having expressed a strong desire to reform her judicial system and to bring it into accord with that of Western nations, Great Britain agrees to give every assistance to such reform, and she will also be prepared to relinquish her extra-territorial rights when she is satisfied that the state of the Chinese laws, the arrangement for their administration and other considerations, warrant her in so doing.

Art. XIII.—The missionary question in China being, in the opinion of the Chinese Government, one requiring careful consideration, so that, if possible, troubles such as have occurred in the past may be averted in the future, Great Britain agrees to join in a Commission to investigate this question, and, if possible, to devise means for securing permanent peace between converts and non-converts, should such a Commission be formed by China and the Treaty Powers interested.

Art. XIV.—Whereas under Rule V appended to the Treaty of Tientsin of 1858, British merchants are permitted to export rice and all other grain from one port of China to another under the same conditions in respect of security as copper "cash," it is now agreed that in cases of expected scarcity of famine from whatsoever cause in any district, the Chinese Government shall on giving twenty-one days' notice be at liberty to prohibit the shipment of rice and other grain from such district. Should any vessel specially chartered to load rice or grain previously contracted for, have arrived at her loading port prior to or on the day when a notice of prohibition to export comes into force, she shall be allowed an extra week, in which to ship her cargo. If during the existence of this prohibition, any shipment of rice or grain is allowed by the authorities, the Prohibition shall *ipso facto* be considered cancelled and shall not be re-imposed until six weeks' notice has been given. When a prohibition is notified, it will be stated whether the Government have any Tribute or Army Rice which they intend to ship during the time of prohibition, and if so, the quantity shall be named. Such rice shall not be included in the prohibition, and the Customs shall keep a record of any Tribute or Army Rice so shipped or landed. The Chinese Government undertake that no rice other than Tribute or Army Rice belonging to the Government shall be shipped during the period of prohibition. Notifications of prohibitions, and of the quantities of Army or Tribute Rice for shipment shall be made by the Governors of the Provinces concerned. Similarly, notifications of the removals of prohibitions shall be made by the same authorities. The export of rice and other grain to foreign countries remains prohibited.

Art. XV.—It is agreed that either of the High Contracting Parties to this Treaty may demand a revision of the Tariff at the end of 10 years, but if no demand be made on either side within 6 months after the end of the first 10 years, then the Tariff shall remain in force for 10 years more reckoned from the end of the preceding 10 years, and so it shall be at the end of each successive 10 years. Any Tariff concession which China may hereafter accord to articles of the produce or manufacture of any other State shall immediately be extended to similar articles of the produce or manufacture of His Britannic Majesty's Dominions by whomsoever imported. Treaties already existing between the United Kingdom and China shall continue in force in so far as they are not abrogated or modified by stipulations of the present Treaty.

Art. XVI.—The English and Chinese Texts of the present Treaty have been carefully compared, but in the event of there being any difference of meaning between them, the sense as expressed in the English text shall be held to be the correct sense.

The ratifications of this Treaty, under the hand of His Majesty the King of Great Britain and Ireland and of His Majesty the Emperor of China, respectively, shall be exchanged at Peking within a year from this day of signature.

In token whereof the respective Plenipotentiaries have signed and sealed this Treaty, two copies in English and two in Chinese.

Done at Shanghai this fifth day of September, in the year of Our Lord 1902, corresponding with the Chinese date, the fourth day of the eighth moon of the twenty-eighth year of Kwang Hsu.

JAS. L. MACKAY.

ANNEX A A—(1).

(Translation.)

Lu, President of the Board of Works ;

Sheng, Junior Guardian of the Heir-Apparent, Vice President of the Board of Works ;

Imperial Chinese Commissioner, for dealing with questions connected with the Commercial Treaties, to,

Sir James Mackay, His Britannic Majesty's Special Commissioner for the discussion of Treaty matters.

Shanghai : K. H. XXVIII., 7th moon, 11th day.

Received 15*th August*, 1902.

We have the honour to inform you that we have received the following telegram from His Excellency Liu, Governor-General of the Liang Chiang, on the subject of Clause II, mutually agreed upon by us : " As regards this clause, it is necessary to insert therein a clear stipulation, to the effect that, no matter what changes may take place in the future, all Customs duties must continue to be calculated on the basis of the existing higher rate of the Haikwan Tael over the Treasury Tael, and that 'the touch' and weight of the former must be made good." As we have already arranged with you that a declaration of this kind should be embodied in an official Note, and form an annex to the present Treaty, for purposes of record, we hereby do ourselves the honour to make this communication.

TRADE OF CHINA.

SPEECH BY SIR ERNEST SATOW.

THE ABOLITION OF LIKIN.

Sir Ernest Satow, His Majesty's Minister at Peking, who arrived in Bombay on the 3rd July 1903, by the mail steamer on a short visit to India, having accepted the invitation of the Committee of the Bombay Millowners' Association to confer with the members on the subject of the China trade, a special general meeting of the members was held in the rooms of the Association the same afternoon, at which members of the Bombay Chamber of Commerce were also invited to be present. The chair was occupied by Mr. Bomonji D. Petit (Chairman of the Association), and there were also present : The Hon. Mr. J. M. Dick, the Hon. Mr. S. M. Moses, Messrs. Sassoon J. David, H. E. E. Procter, H. R. Greaves, C. H. Armstrong, A. K. Leslie, M. M. Fakira, Professor C. V. Muller, Messrs. W. H. Brady, H. Stanley-Reed, S. Abraham, A. Booker, Sassoon Nissim, J. Nissim, Dinshaw E. Wacha, L. Matsui, D. J. Tata, Jamsetji A. Wadia, Vijbhucandas Atmaram, Jehanghir B. Petit, N. N. Wadia, Dwarkadas Dharamsey, H. Tewsley, J. Ichiman, John Stiven, R. G. Monteath, F. F. Gordon, H. Gawthorn, Gokuldas Naranji, Vithaldas D. Thakersey, Govindji Madhowji, K. Gokuldas, J. M. Chichgar, B. Atmaram, R. S. N. Talati, S. H. Batliwalla, Goolam Hoosein Allana, S. M. Ratnagher, M. C. Ebrahim, F. C. Ebrahim, R. N. Wadia, J. K. Parulkar, Narandas Parshotumdas, Dwarkadas Runchordas, R. L. Ugrankar, N. B. Saklatwalla, Bejonji Dadabhoy, Mehrjibhoy N. Kooka, Damodher Lukhmidas, Hormusji R. Umrigar, Hormusji Edulji Bamji, Hormusji Sorabji, and Frederick Noel-Paton, Secretary.

The Chairman, in opening the proceedings, said :—It is my pleasing duty to introduce our honoured guest, Sir Ernest Satow, who has condescendingly granted our request for a conference this evening. The high position he holds in Peking has given him special opportunities of making himself acquainted with China's needs, and as China is intimately associated with India in trade, the remarks which Sir Ernest will, I hope make, be fraught with special interest for us, millowners, especially at the present moment, when questions of vital interests for

both India and China, in connection with the industry with which we are concerned, are on the tapis. Gentlemen, I will not take up more of your time with any remarks of my own, but tender on behalf of the Millowners' Association our grateful thanks to Sir Ernest for having obliged us with his distinguished presence this evening. I now call upon Mr. Sassoon J. David, the Vice-President, to address the meeting. (Applause.)

AN ADDRESS OF WELCOME.

Mr. Sassoon J. David then read the following address :—

We, the President and members of the Bombay Millowners' Association, embrace the occasion of your visit to this city to offer you our cordial welcome, and beg leave to address you on one or two subjects which are of vital interest to the welfare of the Association.

At the annual meeting of this Association, which was held on the 24th of last month, while speaking on the effect of the decline in silver on our trade with China, we ventured to allude to your visit to this country as an occasion when, through your kind courtesy, we might be privileged to express before you our views on certain important points in regard to our commercial relations with China, and be permitted to cherish the hope that, as circumstances and time permit, these views will receive due consideration at your hands.

The suggestion to avail ourselves of your welcomed presence amongst us for the purpose just mentioned emanated from our friend, the Hon. Mr. S. M. Moses, who always takes a very keen interest in the development of our trade relations with China. We must admit, however, that we consented to the proposal with some qualms of conscience, as we thought of the multifarious and important questions—ranging from the claims of various concessionaires to matters of the highest political significance to the British Empire in its relations with the Far East—that awaited you in the exercise of your exalted functions on your return to Peking, and we hesitated in selfishly encroaching on your valuable leisure hours while on a visit to this country, relying, however, on your kind courtesy, and making the importance of the matter in hand our excuse, we telegraphed to you at Aden, with the result that we now feel deeply indebted to you for the privilege you have accorded us in giving us this opportunity to say a few words before you regarding our trade with China.

Yarn for Shipment to China.

As you are no doubt aware, Sir, the cotton mills in India annually sell yarn for shipment to China of the approximate value of about Rs. 81 millions. If to this is added the value of the opium shipments, in which the Association is not interested as a body, although many of us are connected with that trade, the figure would reach the total of Rs. 157 millions. Leaving aside the export of opium, the extent of our textile trade with China will sufficiently account for the keen interest we take in the practical reform which is contemplated regarding the financial administration of the Chinese Empire by the new Treaty signed with China at Shanghai on 5th September last. Although we shall be very glad to know, we are not in a position to determine, Sir, whether Article VIII of the said Treaty—which refers to the abolition of likin—is likely to come into force on the 1st of January next, as Section 15 of the Article provides, that should the Powers entitled to the most favoured nation treatment by China fail to agree to enter into the engagements undertaken by Great Britain by the 1st of January, 1904, then the provisions of the Article shall only come into force when all the Powers have signed their acceptance of similar engagements. Assuming, however, that Article VIII is agreed to by all the other Powers, in due course, and that likin is to be abolished as stipulated in the Treaty, this Association is of opinion that unless the Powers undertake to convince themselves in a most practical manner that no other tax in any shape or form whatsoever is levied by the Mandarins in lieu of likin, the "squeeze" system will not be really abolished. When Sir James Mackay was negotiating with China for the abolition of likin, it was stated that three of the most influential Viceroys in China were long before that actually in favour of all sorts of radical changes, including the abolition of likin, for a direct income such as that which has now been provided for in the

new Treaty. It has also been stated since, that it was these same Viceroys who proposed to the British Government the abolition of likin, and they were taken in earnest by Sir James Mackay and his advisers.

Abolition of Likin.

The announcement that the new Treaty with Great Britain included the abolition of likin was received by us with something more than profound distrust. Amongst the columns upon columns of observations and opinions that flooded the newspapers at the time, there appeared in the "Shanghai Mercury" a series of articles from the able pen of Mr. Thos. Kingsmill, an old resident in China, one who had studied Chinese economics, literature, and politics at first hand, as few of his contemporaries have done, exposing with ruthless logic the fallacy of placing any faith in the possibility of abolishing, by the stroke of a pen, a system of national taxation which owed its origin to causes far down in the stream of Chinese history in fact before the absorption of the Provinces in the Empire. For reasons which have apparently satisfied the Britsh Government—who at one time, according to Lord Cranborne, believed it to be out of the question to expect the aboliton of likin—China was taken at her word, and it was decided, in order to show her that she was taken seriously to give her as a *quid pro quo*, in addition to the effective 5 per cent. import duty provided for in the Protocol of 1901, the right to impose a special surtax equivalent to one and a half times the said duty liberty to recast her Export Tariff, and to levy a Consumption Tax on articles of Chinese origin, and an Excise Duty on all machine-made yarn and cloth manufactured in China. In the absence of any practical guarantee—a thing almost impossible to obtain from the very nature and circumstances of the case—it is open to the Chinese to put an interpretation on this arrangement which will work as ingeniously in their favour as it will expose our simplicity of faith in attaching any reliance to their promises. We have some of us had a long business connection with China, and, speaking from intimate experience of the Chinese and their methods, we are led to believe that the Chinese have scored throughout the proceedings that began with the Boxer Rebellion and terminated with the indemnity arrangement and the new Treaty. Owing to the existence of the various Treaty Ports near all the great trade centres of the Chinese Empire the likin charges on the bulk of imported goods do not, in our opinion, amount to much, and it will be seen from this that the surtax of 7½ per cent., all round, would fall more heavily on the imports than the likin itself.

A More Chinese Interpretation.

It is true that it is clearly understood in the Treaty that no attempt shall be made to revive likin in any form or under any pretext whatever; but with all due deference to the opinion of those who put faith in the promises of the Chinese Government, it is possible to put a more practical, a more likely, a more Chinese interpretation on the whole arrangement.

China fails to drive out the foreigners and is punished for attempting such a move by the imposition of an indemnity. She says she cannot pay—Great Britain comes forward and tells her: "Increase your import duty to an effective five per cent!" The influential Viceroys, dismayed at the prospect of the Central Government calling upon them to rush to the rescue of the Imperial dignity with all the cash in their possession, resort to diplomatic finesse, and invite the British Government to extricate them out of the difficulty. They say in so many words that they wish to abolish likin if Great Britain will arrange that the Viceroys get their portion of the surtax through the Imperial Customs to compensate them in a measure for their loss of revenue. Therefore, by promising to abolish likin they secure the direct receipt of so much net revenue per annum, instead of the precarious items that filtered into their coffers through the Mandarinate, and they thus pay the indemnity with our own money. Having arranged this they tell their underlings, the Mandarins, to shift for themselves. There is the Consumption Tax which they can use for taxing foreign goods, under some excuse or other, to any extent, and there is no one to see, or report, or punish. These Mandarins are left to devise their own means for making both ends meet, and it is they who throughout the kingdom will create new excuses for new taxations, in any shape or form, without fear: for where is the army of inspectors to stop them? Consequently we shall have to pay 12½ per cent. import duty and the likin squeezes as well—and this is where China scores.

Duty on Machine-made Yarn.

In the second place there is the Excise Duty on all machine-made yarn and cloth manufactured in China, which amounts to double the import duty as laid down in the Protocol, *i.e.*, 10 per cent. *ad valorem*. In a properly organised Government it would be possible to expect that such a duty would be collected methodically. But in a country like China the returns of the local mills in the interior cannot always be depended upon, and their produce might escape the Excise Duty by either being passed off as imported goods, or by the non-declaration of the full quantity of their manufacture, unless the statistical department of the Chinese Customs arranges for the obtaining of reliable figures and facts.

Thirdly—there is the question of our exchange trouble with China. It will not be necessary for me to say many words on this subject. Since our adoption of the gold standard our trade with silver-using countries has been adversely affected. The decline in the price of silver means to us that we get fewer rupees in exchange for our dollars in China. We can only look for relief to the possibility of the Chinese Government carefully considering its present currency policy, so that they may at an early date mitigate the evil of the existing situation and benefit both India and themselves.

And now to sum up.

Firstly.—The likin question seems to us a most difficult one, and unless an army of European Excise Inspectors are employed we are very much afraid that the Mandarins will not fail to compensate themselves for the abolition of likin by means of illegal taxes which it will be almost impossible to check, and therefore it would be safer not to insist on the retention of Article VIII in the Treaty in the interest of foreign traders with China.

Secondly.—If Article VIII is retained, imported goods would require absolute protection against indigenous merchandise being left untaxed by means of misrepresentation or bribery.

Thirdly.—In the interests of India and China alike, the latter country should be induced to introduce at an early date an efficient currency policy which would give stability to their mutual commercial relations.

Having expressed our views on these important points, I now beg on behalf of my colleagues, and all those interested in the China trade, to offer you our best thanks for your kind courtesy in obliging us by being present here on this occasion.

SIR ERNEST SATOW.

Sir Ernest Satow, who was received with applause, said :—Mr. President and Gentlemen,—The magnitude of the interests of Indian commerce in China affords a complete justification of the wish you have expressed to acquaint me with your views as to the effect of the new Commercial Treaty on that trade, and of your desire to obtain such information as I may be in a position to communicate. I need hardly say that it has given me very great pleasure to receive your invitation to meet you here to-day, as it affords me an opportunity of affirming the solidarity of British interests in all parts of the world, and of expressing my belief in the necessity of co-operation between H. M.'s subjects, no matter where their sphere of activity may lie, and servants of the State, no matter under what department they may be serving. (Applause.) With regard to the first question in which you are interested, namely, whether Article VIII of the new Treaty is likely to come into force on 1st January next, I think I may safely say that such an event is practically impossible. Of the numerous Powers that are entitled to most favoured nation treatment in China, only two besides Great Britain have up to the present commenced negotiations for the revision of their commercial treaties. Those negotiations, after proceeding for more than six months, have, I understand, come to a standstill in consequence of the proposal made by the Chinese Government to remove them from Shanghai to Peking. This proposal, as far as is known at present, has not been accepted by the two Powers concerned, and I am unable to say when it is likely that the negotiations will be resumed. Even supposing that they were brought to a conclusion, it is unlikely that the arrangements as to the abolition

of likin evil they will contain will be found to be identical with those inserted in the British Treaty. The remaining Powers, I believe, have as yet appointed no negotiators, and judging from our past experience of what happens when a number of Powers having varying interests find themselves face to face with negotiations that cannot have effect until all the separate interests, separately promoted, have been reconciled, I think it is likely to be some time yet before all the Treaty Powers will fall into line with respect to this question of likin.

Reform of the Existing System.

You are aware, gentlemen, that the reform or abolition of the existing system—or want of system—in the levying of the transit dues known as likin, has been urged upon the attention of H. M.'s Government by various bodies interested in the China trade, and especially by mercantile bodies directly connected with China, for many years past. It was impossible, therefore, when an opportunity was given to H. M.'s Government of negotiating a revision of the Treaty of 1858, that they should not avail themselves of it, in order, if possible, to give satisfaction to the interests of manufacturers and merchants. And I venture to think that if we could count upon the good faith of the Chinese Government in carrying out their engagements, such an arrangement as is contained in Art. VIII of the Treaty so patiently and skilfully negotiated by the British Commissioner, Sir James Mackay, is the best that could be made in order to obtain the end in view; namely, of freeing commerce from the fetters imposed on it by this system of internal taxation, while at the same time securing to the China Government a revenue sufficient for carrying on the administration of the country, and for meeting their financial obligations to foreign Governments and investors in the Chinese foreign debt. But since there are Powers whose interests in the prosperity of the China trade can by no means be compared with those of the British Empire in point of magnitude of those interests, it is not unnatural that they may feel less earnest in this matter than H. M.'s Government have shown themselves. There is one remark, I feel, it is necessary to make in reply to the observation that, when China declared herself unable to pay the indemnity imposed upon her to meet the expenses of the expeditions despatched by various Powers to relieve the foreign legations, to protect foreign residents throughout China, and to put down the Boxer movement, Great Britain came forward and said "increase your import duties to five per cent." Gentlemen, this proposition was not made by Great Britain. It can safely be affirmed that if Great Britain alone had been concerned, she would have displayed the same moderation as she showed in 1858 and in 1860, when she demanded an indemnity far inferior in amount to the expenditure she had incurred, in common with her single ally on those occasions; but there were other Powers that did not feel the same disposition, and the only principle which found favour was that of insisting upon China paying the whole cost of the expedition of 1900.

Moderation and Consideration.

When, under such circumstances, it is indispensable in order to arrive at a settlement that unanimity must be obtained, when there are eleven Powers negotiating for a common purpose, it is necessary for those who find themselves in the minority to give way, and thus H. M.'s Government found themselves unable to manifest that moderation and consideration for China that they would have preferred. It was urged upon them by certain of the Powers with much insistence that the Customs duties should be raised to 10 per cent. *ad valorem*. They refused to consent to this proposal, which would have cast the greater portion of the burden upon British commerce, but as a compromise they intimated their willingness to revise the import tariff, so that the duties should become what they were intended to be by the Treaty of 1858, namely, 5 per cent., and in doing this, I think, they must be held to have defended British interests very effectually. You will not, gentlemen, I think, expect me to discuss the whole of Article VIII in all its details, nor to go into the question of the excise duty, especially as I have not the text before me. At the same time, I would beg to remind you that such safeguards have been provided as in the opinion of H. M.'s Government will sufficiently ensure its fair application, so that the import trade shall not suffer

any detriment from the Article being carried into effect after it has been accepted by all the other Powers. (Applause.) With reference to the question of exchange with China, I fully recognize the inconvenience of the fluctuations which must necessarily occur in the exchange between gold and silver countries, and I trust it may not be impossible to find a remedy. I would, however, not wish it to be supposed that this can be found by retracing the steps that have been taken in the past with regard to the currency of different portions of the British Empire. Year after year more States have adopted the gold standard, and I believe that it is destined to become universal. You are aware that the Governments of the United States, Mexico and China, being the two principal silver-producing countries, and the chief silver using country have taken up this question, and that a Commission charged with its study has been despatched from America with the object of conferring with the Governments that are chiefly interested in Chinese commerce and finance. It is too early yet to make any forecast of what the result of their labours may be, but, speaking for myself, I may perhaps assure you, gentlemen, that the reform of Chinese currency is a matter in which I take a deep interest, and that I shall gladly carry out any instruction I may receive from H. M.'s Government to assist in urging upon the Chinese Government the adoption of the necessary measures. (Applause.)

"THE NEAR FUTURE."

In answer to a question by Mr. H. E. E. Procter as to what he meant by the words, "the near future," Sir Ernest Satow said nothing was so dangerous as to prophesy unless one knew. But the Commission arrived in London in the beginning of June. After sitting in London the Commission would go to Berlin, Paris, the Hague, and, he believed, St. Petersburg. He believed that four or five months would be occupied in Russia, as the latter country had big interests at stake and claimed one-third of the total amount of the indemnity. Then, of course, when the Commission was finished, there would come the most difficult part of all—the persuading of the Chinese Government to accept its proposals. They were all aware that the Chinese currency was in a most confused state. Then there were other difficulties. But it was quite evident that unless some reform was effected in the systems of currency and taxation which existed in China, she would have the greatest difficulty in extricating herself from her present financial situation. Unless they gave a very liberal meaning to the words "the near future" he did not think the change would come about in the near future, and they should be prepared to labour under the inconveniences which existed at present for at least some years longer. (Applause.)

Mr. C. H. Armstrong desired to know what was the position of Hongkong in the matter of a gold standard.

Sir Ernest Satow, in reply, said he was not in a position to say what was likely to happen. He, however, knew that the interests of Hongkong were bound up very much with those of the mainland, and by many interested in the trade of Hongkong it was thought that it would be suicidal for them to adopt the gold standard when China did not.

VOTE OF THANKS.

The Hon. Mr. Moses, in moving a vote of thanks to Sir Ernest Satow, said:—I deem it a pleasure as well as a great privilege to be deputed by this Association to propose a hearty vote of thanks to you, Sir Ernest, for so kindly favouring us with your presence this afternoon. We fully appreciate the courtesy which prompted you to meet us, and to give us the expression of your views upon the various subjects of commercial importance in which the interests of India and China are so closely interwoven. Sir, I have lived in China for eighteen years, from 1862 to 1880, and am, therefore, able to endorse the remarks made by my friend, Mr. David upon the fiscal system of that country. I have grave doubts as to the practicability of the Chinese Government being able, by abolishing the likin dues altogether, to guarantee that an additional tax will not be raised in the interior, only under a different name, by those who were dependent upon those dues and who will thus continue to hamper our trade. I would, therefore, venture to warn our

133715

Government against such an eventuality which will most probably take place. But it has afforded me, and I dare say to many of us present, much pleasure to hear from you, Sir, that owing to the multiplicity of interests involved that the Article VIII of the new Treaty is not likely to come into force for some time to come, and I may cherish the hope that it may not come into operation at all. We are also very pleased to hear that your sympathies are with the gold currency. We wished to have brought forward this subject prominently before you to-day, but we appreciate it all the more from allusion to the prospects of a gold currency being established in China at no distant date. It is seldom that we are favoured with a visit by H.M.'s Minister to China, the last having been made by the late Sir Harry Parkes so long ago as about 1875. I sincerely trust that your visit to this country will be followed by your successors, as such occasions afford opportunities of exchanging views with the Viceroy and of personally conferring with those who take a large interest in the trade between this country and China. I am certain they will benefit by following the example you have given upon this occasion. I thank you, Sir, for your kindness, on behalf of this Association, and will conclude by briefly moving that a hearty vote of thanks be accorded to you.

The Hon. Mr. J. M. Dick desired to express, on behalf of the members of the Chamber of Commerce, of which he was the Chairman, their best thanks to the Millowners' Association for having invited them to be present at the meeting.

Sir E. Satow, in reply to the vote of thanks, said he was very grateful for the kind reception which had been accorded and the remarks which he had been privileged to make. They knew that he could not take all of them into his confidence, as he could if he had been separately dining with them at the club, and smoking a cigar after dinner. (Laughter.) He felt great pleasure in having an opportunity of meeting them. He came to Bombay after five and thirty years, and he congratulated them upon the immense progress the City of Bombay had made during that interval. He believed that in public service nothing could be more useful than a knowledge of political and commercial geography, which was only to be acquired by visiting places. For his part he knew that Bombay was on the western side of the Peninsula, Madras on the eastern; but there was a great many people who did not know as much as that. (Laughter.) He was quite certain that he had derived great advantage by exchanging views with them, and after that meeting he would be in a very much better position to promote the interests of trade between India and China. (Loud applause.)

The proceedings then terminated.

Appendix I.

Shuttle Guards.

No. $\frac{\text{F. I.}}{587}$ of 1902.

From

THE CHIEF INSPECTOR OF FACTORIES,

BOMBAY,

To

THE SECRETARY,

THE MILLOWNERS' ASSOCIATION,

BOMBAY.

FACTORY DEPARTMENT,

BOMBAY, *7th November* 1902.

SIR,

It has been brought to my notice that a large number of accidents have been caused by flying shuttles, and I am of opinion that all looms should be guarded. Before I issue orders on the matter, I shall be glad of the opinion of your Association as to the sort of guards that should be provided.

2. The fixed bar is the most efficacious and I should prefer this pattern, but I believe it interferes with the weaver when he wishes to draw warp threads through the reed. If you consider the fixed bar would diminish the output of the looms, I am prepared to order the application of a moveable automatic slay guard, but I may point out in the first place that these are more expensive than the fixed guards, and secondly that workpeople are certain to keep them turned up and tied up unless theyare carefully watched, and that if they are adopted, the responsibility for their proper use will be thrown on the Millowners.

I have, &c.,
H. WILKINSON,
Chief Inspector of Factories,
Bombay.

MILLOWNERS' ASSOCIATION,
BOMBAY, *6th December* 1902.

THE CHIEF INSPECTOR OF FACTORIES,
BOMBAY.

SIR,

Under the instructions of the Committee of the Bombay Millowners' Association, I have the honour to acknowledge the receipt of your letter No. $\frac{F.\ I.}{687}$ of the 7th ultimo, and your further communication No. $\frac{F.\ I.}{831}$ of the 4th instant, with regard to the accidents caused in mills by flying shuttles.

The matter is so important that the Association has appointed a Special Committee to consider and report upon the subject. The papers are now before this Special Committee, and so soon as they have completed their report I shall have the honour of communicating further with you.

You will, I think, understand that a matter which has been the subject of so wide and so protracted a divergence of opinion in industrial centres at home where expert knowledge abounds is not a matter that can, with the best of good will, be settled suddenly in Bombay.

I have, &c.,
FREDERICK NOEL-PATON,
Secretary.

16th January 1903.

THE CHIEF INSPECTOR OF FACTORIES,
BOMBAY.

SIR,

Under the instructions of the Committee of the Bombay Millowners' Association, I have the honour to acknowledge the receipt of your letter No. $\frac{F.\ I.}{687}$, dated 7th November, on the subject of the adoption of shuttle guards in Bombay Mills.

2. On the receipt of that letter a circular was issued to Members calling for an expression of opinion on the various points involved, and a Sub-Committee was appointed to consider the replies and report to the General Committee.

3. That Sub-Committee has now reported, and my Committee are not fully satisfied that the accidents from flying shuttles could be held to be sufficiently numerous to call for the adoption of appliances which will unquestionably reduce the output of many looms and to that extent injure the industry and the labour market. Accidents do, however, occur from the cause stated; and the Committee recognise that it falls within the duties of Government to say whether protection is necessary. They therefore do not contest the principles that the adoption of some form of shuttle guard is desirable.

4. They do not, however, think that Government should seek to prescribe any particular form of guard. It will be sufficient if Government reserve the right of condemning any pattern that is demonstrably inefficient. In the opinion of my Committee fixed guards are entirely out of the question for practical use, seeing that they very greatly impede the work. Millowners would rather incur the extra expense of automatic guards than the serious reduction of their output; but of course if any individual should prefer the cheap fixed guard there ought, in the opinion of the Committee, to be no objection on the part of Government.

5. There are many patterns of automatic shuttle guard in existence. Some of these have already been received in Bombay and a variety of other kinds are expected shortly. They will be affixed and tested; and as soon as they are in work, notice will be given to you. It will then be possible to decide from actual demonstration whether any of the various patterns are inefficient and to make a list, to be added to from time to time, of those descriptions of shuttle guards which are recognised by your Department. Pending the conduct of these experiments, for which the material does not at present exist in Bombay, it is hoped that you will not press for the precipitate adoption of guards which might be found by experience to be in some way unsuitable.

I have, &c.,
FREDERICK NOEL-PATON,
Secretary.

No. $\frac{\text{F. I.}}{58}$ OF 1903.

From

THE CHIEF INSPECTOR OF FACTORIES,
BOMBAY,

To

THE SECRETARY,
THE MILLOWNERS' ASSOCIATION,
BOMBAY.

FACTORY DEPARTMENT,
BOMBAY, 28*th January* 1903.

SIR,

I have the honour to acknowledge receipt of your letter, dated 16th January, on the subject referred to in the margin. I note that while the Association do not contest the principle that the adoption of some form of shuttle guard is desirable, they express the hope that no precipitate action will be taken in the matter, and that a formal decision on the question may be reserved until the conclusion of the present experiments. To this I have no objection and am prepared to postpone for the time being the issue of orders on the subject.

Adoption of shuttle guards in Bombay Mills.

I have, &c.,
M. M. S. GUBBAY,
Chief Inspector of Factories,
Bombay.

Proceedings of the Annual General Meeting.

The annual meeting of the members of the Bombay Millowners' Association was held at the Chamber of Commerce rooms on the 24th June 1903, Mr. Bomanjee Dinshaw Petit (Manockjee Petit Manufacturing Co., Victoria and Framjee Petit Mills), presiding. There were also present: Mr. Sassoon J. David (David Mills Co. and Standard Mills Co.); Mr. Jehânghir B. Petit (Godavery Ginning Co., Parbani Ginning Co. and Oomri Ginning Co.); Mr. Manmohandas Ramjee and Mr. Vithaldas D. Thackersey (Western India, Indian and Hindustan Mills); Mr. N. N. Wadia (Century Mills Co. and Textile Manufacturing Co.); Mr. Jamsetjee A. Wadia and Mr. Fazulbhai C. Ebrahim (Currimbhoy Mills Co.); Mr. W. H. Brady (Colaba Land and Mills Co.); Mr. Dinshaw E. Wacha and Mr. Narotamdas M. Goculdas (Morarji Goculdas S. and W. Co., and Sholapore S. and W. Mills Co.); Mr. J. K. Parulkar (Jewraj Baloo S. and W. Co.); Mr. S. A. Nathan, Mr. D. S. Shellim and Mr. S. Myers (E. D. Sassoon Mill); Mr. H. R. Greaves (James Greaves, Empress, New Empress, Connaught, Howard and Bullough, Leopold and Imperial Mills); Mr. Ahmedbhoy Hubibhoy (Surat Press Factory, Apollo Press Estate and Nicol Mills); Mr. S. H. Batliwala (Jamshed Mill Co.); Mr. H. Gawthorne (Kohinur Mills); Mr. Dwarkadas Dharamsey (Bombay Cotton Manufacturing Co.); Mr. A. G. Dovey (Sassoon S. and W. Co.); Mr. N. B. Saklatwala (Swadeshi Mills Co.); Mr. K. H. Mehta (Central India S. and W. Co.); Mr. D. C. Shroff (City of Bombay Mills Co.); and Mr. Frederick Noel-Paton, Secretary of the Association.

THE CHAIRMAN'S SPEECH.

The Chairman in proposing "That the Report of the Committee of the Bombay Millowners' Association for the year 1902, together with the statement of accounts appended thereto, be approved and adopted," said :—The first and foremost observation of a reassuring character that I have to make, and one which will no doubt be welcome to all, is that the mill industry of India has had a smooth sailing, not to say a prosperous one, in the year under report, having been in no way hampered by political or natural causes. The year under review does not record any increase in the number of spindles, but the total of looms of all India, however, shows an increase of 1,400, or about 3 per cent. Coming now to the consumption of cotton in all India it is encouraging to behold an increase of 414,000 bales on those of the preceding year, the Island of Bombay alone consuming 291,000 bales more. The number of spindles in all India is 5,000,000, Bombay Island alone contributing 50 per cent., or 2,500,000. Judging from this, the increase of consumption in cotton over 1901 in Bombay ought to be proportionately 207,000 bales, whereas it is 291,000 bales as stated above, which conclusively points to the fact that in 1901 the number of spindles closed temporarily in Bombay was proportionately more than those of other up-country mills. The statistical review of cotton consumed since 1893 reveals that the year under report has overtopped all the preceding figures, being even higher than 1899 with 1,675,000 bales, and this, therefore, argues that the mills have worked full time without the stoppage that was characteristic of 1901, when cotton prices had gone so high as to necessitate that procedure. But full time working in its turn does not argue that the spinning industry is in a highly prosperous state. Far from it—most of the concerns can only show that they have made no loss, and a few only a moderate margin of profit; though the industry has not had to cope with crippling and undermining factors as was the case in the two preceding years. Still, when the percentages of depreciation, viz., about 15 per cent. are taken into consideration for the years 1900, 1901 and 1902, the little profit made in the year under report becomes absorbed therein.

CLOSING OF THE MINTS.

In the interests of the trade I am constrained to go over the same ground as I did last year, and that is the closing of the Mints, the results of which have had a very deterrent effect on our spinning industry. This procedure on the part of Government has had the direct effect of lowering the exchange in China; the fluctuations of which are so varying in their character as to upset the most careful calculation. We ought therefore to devote our serious attention in

trying to devise means whereby a factor that handicaps us can be successfully stemmed and nullified. It would not help us to merely record our complaint at a meeting like this. From the drift of Government policy, we see no likelihood of the Mints being opened again, and rather than agitate for a measure which is hard to obtain, we must, by a concerted movement, supported by substantial and irrefutable facts, ask the intercession of Government in devising such measures as may lead to the establishment of a steady exchange for China whatever that equivalent may reasonably be. The establishment of a stable exchange is not the only desideratum to be wished for, for besides impediment, there are others in our way, namely, the fact that China competes with us by her local productions, and that Japan, having ceased to be a consumer of our yarns since 1890, sends her extra productions to China. In spite of these competitive factors which are beyond our control, and hence irremediable, our yarn is in great demand, as evidenced by the following figures :—In 1902 the yarn exported to China was 555,000 bales, being 19,000 bales more than that in January 1901, the balance of unsold stock in January 1903 not being more than that in January 1902. The fluctuation of exchange is the only item we can by representation to Government remedy, as the fixing of it would no doubt redound to the prosperity of our trade.

Cloth of Finer Counts.

In 1900 before this very Association, as a means of salvation for our spinning industry, I dwelt on the utter urgency of turning our attention to the manufacture of yarn and cloth of finer counts, whereby we could profitably divert a great portion of the yarn we are exporting to China to our own local consumption, thereby to a great extent doing away with the disadvantages of the foreign market. From the last Government report to hand of the statistics of cotton spinning and weaving in the Indian mills, when we look at the productions of three years, *viz.*, 1900, 1901 and 1902 (each year comprising a period of 11 months from April to February), we are glad to notice an increase of 50 per cent. in the production of yarn from No. 21's to 30's, as the following figures will clearly indicate :—

In 1900 production	...	...	...	5,11,00,000	lbs.
„ 1901 „	...	...	...	6,53,00,000	„
„ 1902 „	...	...	...	7,60,00,000	„

Counts from No. 31 to 40 show an increase of 15 per cent. over that of 1900 :—

In 1900 production	..	...	...	98,00,000	lbs.
„ 1901 „	...	...	...	1,15,00,000	„
„ 1902 „	...	...	...	1,13,00,000	„

The same, however, cannot be said of the production of yarn over 40's. The following figures showing the enormous decrease of 75 per cent. :—

In 1900 production	...	...	...	25,52,000	lbs.
„ 1901 „	...	...	...	8,57,000	„
„ 1902 „	...	...	...	6,30,000	„

This is deplorable ; but in my opinion this enormous falling off is to be attributed to the high prices of Egyptian cotton which must have incapacitated the millowners from importing it to Bombay.

Dependence on Other Markets.

This clearly demonstrates our dependence for cotton of longer staple on other markets, and the consequent restriction of production of finer counts, if such cotton is improcurable on account of prohibitive prices or some other cause. It is my firm conviction that a healthy and profitable impetus could be given to the existing trade if we exerted our energies in manufacturing from Indian cotton 30's warp and 36's to 40's weft. This would, as I have stated in the earlier part of my speech, obviate the necessity of our having to look to foreign consumption of our goods, as the production thus turned out could be utilised with the greatest advantage in manufacturing cloths of finer counts for local consumption. This would make us independent, and put us in a better position to serve the needs of our country. But before we can do this, before we can arrive at the desired goal, it is a *sine qua non* that the cotton grown must be of longer staple,

and, as I advocated last year before you, the Government ought to be memorialised in the interests of India's staple industry, to distribute freely on a liberal scale seeds of longer staple to cultivators. Gentlemen, after speaking on several points detailed in the report, I will close my speech. As to the vexed question of ventilation we are all looking forward to the arrival of the apparatus, and trust that its efficient working will set at rest a much discussed topic, to the satisfaction of all concerned. As to short reeling absolute exactness is unattainable, and it is difficult to draw the line between actual carelessness and deliberate fraud. But, to a certain extent, the requirements of the Act could be met with by adopting a reeling wheel of 82 teeth instead of 80 teeth, as the greater length reeled by this method counteracts the failing of a reeler to piece the threads together in time.

Cotton Duties.

I will not take up your time in discussing the well worn, but all engrossing, topic of cotton duties, and I leave it to my able successors to expound their learned views. I cannot, however, refrain from making a passing reference to the apparent injustice of the imposition which is not for the sake of revenue but at the mandate of the powerful Lancashire vote. We are all glad to see that owing to the prosperous Budgets of the last three years, the Salt Tax had been reduced and the level of income for the assessment of Income Tax raised. That the abolition of Excise Duty in such prosperous financial years should be ignored is a matter of regret, but what is disheartening is the reply given by Lord George Hamilton, the Secretary of State, to the recent important deputation that waited on him at the India Office praying for the early abolition of the Import and Excise Duties on cotton goods in India. In the course of his reply he said: "So long as I am Secretary of State for India, and these cotton duties are in operation, I will undertake that the Excise Duty shall be operative." This is disappointing, but let us hope that the budgets may grow so increasingly prosperous as to lead to the abolition of a tax "that was levied to meet emergencies and continued in spite of those emergencies being no more." Mr. John Whittaker, one of the deputation in the course of his remarks, said: "They had the pledges of the Secretary of State and of his predecessor, and the pledges of the Bombay Government that there would be 'no protection,' and it was on that understanding that the House of Commons passed the Financial statement." No protection! I emphatically declare that it is not only protection but even more than that, as the following illustration will show.

Cloths from Manchester.

It is a patent fact that nearly all cloths imported from Lancashire are of finer counts than 24's. Now as per the latest Government statistics, cloth manufactured in all India from April 1902 to February 1903 was 11,27,00,000 lbs., and allowing for the sizing used at about 16 per cent., 1,80,00,000 lbs. would have to be deducted to arrive at the quantity of yarn consumed, *viz.*, 9,47,00,000 lbs. Bearing this in mind, we find in the same report that the output of yarn over 24's in all India for the same period is 3,32,00,000 lbs., all of which could not have been used in the manufacture of cloth, as a great portion thereof must have been sold as reel yarn, but let us grant for the sake of argument that the whole output was turned into cloth which with the sizing process would amount to 3,85,00,000 lbs. Now if the scales were evenly held between Lancashire and India in 'affording protection' to the former, the Excise Duty should be charged on 3,85,00,000 lbs., and not on the total production of cloth by the mills in India, *i.e.*, 9,47,00,000 lbs., which as I stated is something more than "protections." Besides this duty though 3½ per cent. in name is in reality 7½ per cent. This is parodoxical; but the following lucid illustration will bear me out. The complete cost of erecting a loomshed of 500 plain looms is about Rs. 4,00,000. The daily outturn of 500 looms is 6,000 lbs. or 18,00,000 lbs. per year of 300 days. Taking the price of cloth at 7½ annas per lb., the total value amounts to Rs. 8,40,000. The Excise Duty on this at the rate of 3½ per cent. works out at Rs. 30,000 or as much as 7½ per cent. on the total value of the loomshed of Rs. 4,00,000. Thus you will see what a heavy item this impost is on our industry. As for the reduction in the rates of freight on yarn from Bombay to China, I am glad to say that the Committee have gained their point, to judge from the recent reply of the Conference lines.

Progress of the Mill Industry.

As I have already said there was no appreciable progress during the last three years save that of 1,400 looms in all India. However, I think within a year's time about 3,000 fresh looms will spring up with an additional output of 30,000 bales annually. I hope that the demand is commensurate with the growth of our industry and that no balance lies on our hands, so as to overstock the markets, as this would put the weaving industry in a predicament similar to our spinning. This could be obviated by turning out cloths of finer counts and those not hitherto manufactured here. The amended rules and regulations are set forth for our adoption. I trust that Rule 4 specifying Rs. 50 as the minimum of subscription and Rule 5 embodying the form of adherence will meet with general approval. Before I resume my seat let us express our appreciation of the praiseworthy manner in which the Secretary and the Assistant Secretary have been performing their duties towards the Association, the lucid and interesting report submitted being but an instance of their zeal and energy in the cause of the Association. (Applause.)

MR. SASSOON J. DAVID.

Mr. Sassoon J. David, in seconding the adoption of the report, said :—We have all, I am sure, heard with great interest the remarks made by the Chairman, and must feel indebted to him for the statistical and useful information which he has placed at our disposal. I do not wish to travel over the same ground by repeating what he has just said, but there are a few points of some importance to which I should like to refer on this occasion. In reviewing the results of the working of the local mills during the past year, I have noticed that some of the well-managed and financially sound concerns have done fairly well, and I am of opinion that if the currency factor was not against us, not only all the mills would have benefited, but we would have been able to record a marked expansion in the industry as a whole. It is true, as the Chairman has said, that there has been a satisfactory demand for our yarn in China during the past year, but I am in a position to assure you that to the shippers who are our constituents, the business during the period mentioned meant a heavy loss in exchange.

The Mill Hands.

Some years ago I alluded, at this very Board, to another question which demands serious consideration at the hands of millowners, namely, the question of efficient labour. On that occasion, and since then on several occasions in the past, I dwelt with some emphasis on the paramount necessity of our attaching due importance to the need of economy in management and efficiency on the part of the staff and mill hands. In 1901 I pointed out that the advantage which we derived from the cheapness of labour in India, as compared with the individual wages ruling in Lancashire, was more than counterbalanced by the relative incompetence of the individual hand, and by the consequent necessity of employing at least three times the number of hands for the same work. But although the soundness of these views has been theoretically accepted, and similar views are also independently entertained by some of my colleagues, I regret that on the whole very little has been done as yet, which might justify the hope that we would in the near future see our mills peopled with trained workmen who would be interested for more than the passing hour in the prosperity of the concern to which they might be attached. It is high time, therefore, that we devoted our earnest attention to the devising of means to attain the end we have in view. Unfortunately the plague scare has, for years past, rendered almost impossible any attempt on our part to ensure trained efficiency among our mill hands. The general practice, among the latter, of fleeing to their villages on the slighest pretext to squander their savings in idleness, has also hitherto formed another serious obstacle to their efficient training. Grave as these difficulties are, and will continue to be if left unsolved, the time, I think, has come when we should no longer hesitate to grapple with them. As a step towards their solution I would suggest that the millowners should go fully into this matter and adopt some measures to bring about a better state of affairs, such as the formation of Provident or Compassionate Funds, or the granting of a pecuniary interest in the profits in the shape of bonuses or premiums to those who put in a certain minimum number of days at their work during the year. By such means as these we

can train up our mill hands to such a standard of efficiency as to make it possible for us to spin or weave a much higher class of goods than we do at present for meeting the requirements of this country, as just stated by the Chairman, and becoming independent of the China market. When we have done this we shall be in a position to use American as well as Egyptian cotton to a very large extent, and I daresay that in that case some enterprising firms will soon be found who will arrange for direct shipments of the American staple to this port.

An Inefficient Staff.

This will be more businesslike than making futile appeals to Government to grow the required kind of staple for us. While on this subject I may briefly allude to the shortsighted, or suicidal, policy which induces some of our millowners, with a false notion of economy, to adopt the penny-wise-and-pound-foolish expedient of working their mills with the assistance of a cheaper, what amounts to the same thing, an inefficient staff. If any one has the interest of the principal industry of this great city at heart, and takes a broad view of the millowners' prospects in the future, it is his duty, I think, to condemn this practice. The efforts of individual millowners to keep up the reputation of our outturn will not help us much in the hour of struggle if we one and all do not strive, and strive honestly, to command success by deserving it. The question of Excise Duty is the pet little bugbear of the Indian millowner, and has been of late honoured with a good deal of attention. I do not, however, think that we need feel beaten, as yet, on this point, since our Lancashire competitors, to whom our Chairman has referred, have adopted a course which promises to free us from the infliction complained of the moment they free themselves of the import duty. On the other hand, if we consider the benefit derived by this country from the three-and-a-half per cent. import duty—which, by the way, is much greater than the benefit derived from our excise duty—the question assumes a complex aspect, and strange as the statement may appear as coming from a millowner, especially after the remarks just made on the subject by the Chairman, it seems to me that it is a question worth considering whether or not we ourselves and the country at large would be gainers in the long run if instead of abolishing the excise and the import duties, the Government were to maintain them. As matters stand now, however, our Lancashire friends have taken up the cudgels against the import duty, and when they succeed in getting rid of it, we shall in that case be automatically rid of our excise duty.

There is another question on which I should like to say a word or two, and that is the preferential tariff *vs.* free trade discussion raised by the Colonial Secretary. While some of the great statesmen in England are doubtful about the feasibility of Mr. Chamberlain's preferential tariff scheme, it will serve no useful purpose to speculate here as to the probable issue of this momentous question. In alluding to the subject I merely wish to express the hope that India's interests will be safe-guarded in the event of a new tariff scheme being adopted by great Britain and her Colonies.

THE IMPROVEMENT TRUST.

I now come to a subject which concerns us only locally. In 1901 a suggestion was made by this Association to the Improvement Trust with the object of housing our mill hands in our own premises, or in the vicinity of our mills. Since then, as you are well aware, we have been in correspondence with the Improvement Trust Board regarding this matter, and it is to be hoped that at our next annual meeting we shall be able to look back to an arrangement which would be beneficial to the City at large as well as to the mill hands who, as a class, form such a large proportion of our population. In thanking you for again electing me as your representative on the Board of the City Improvement Trust, I think it is my duty to say a few words, on this occasion, regarding the working of the Board. As we must all admit, our interest as millowners and large employers of labour makes it incumbent upon us to concern ourselves with the doings of a body to which have been entrusted the sanitary regeneration of this city and the housing of the poorer classes in model chawls. I therefore take this opportunity to state that although the Trustees were rather too ambitious and hasty in the beginning in taking up too many schemes in hand, it seems to me that most of the criticisms that have been recently levelled against them were unmerited. I

must also say that in face of the almost insuperable difficulties the Trustees have had to cope with they have not done badly. With the means at their disposal; and the hurriedly framed legislative enactments which control their operations, the Trustees could not have accomplished more than what they have done. It should also be remembered that the Trustees are now settled down to their work, and have systematised a method of acquiring properties and building chawls as fast as any body could wish. As regards the finances of the Trust, I believe that the more the Trustees strengthen their position the better it will be for the true welfare of the city and for the facilitating of the Trust's operations in the future. It will be a good day for Bombay when all parties concerned see their way to work in harmony with the Improvement Trust, and devote less attention to fault-finding.

Currency and Exchange.

There is another subject that has been for years past agitating the world of commerce, not only in India, but in almost every part of the world. I refer to the continuous decline in silver which has played such a great part in crippling our industry and penalising our export trade. Without going deeply into the currency problem, I must say that it is beyond question that the closing of the mints has grievously hampered our trade with silver using countries, and adversely affected the agricultural interests of India. I cannot therefore help thinking that but for our meagre advantage in the shape of indigenous cotton our position would have been worse than precarious. It seems useless at the present moment to hope for any assistance from Government—the fiat has gone forth, and we must do our best to keep our heads above water, while Government is calmly looking on at the struggle. It will be also useless to picture to ourselves what might have been our present condition but for this fiat of Government. Japan would have had no advantage over us in competing for the China market, while China itself would have found it very unprofitable to put up her own mills. As it is, Japan is pouring hundreds of thousands of bales of yarn annually into China; and China is in her turn learning to manufacture her own thread. The only practical remedy for our exchange trouble with China would, I venture to think, be found in the establishment of a gold standard by China, as suggested by so many competent authorities. The foreign Powers interested in the trade of that vast country can and ought to help her to "go gold," so that she might be brought into line with gold using countries for the benefit of the world's trade.

Freight to China.

With reference to our Chairman's remarks about the rates of freight to China, I should like to add that the Conference Lines at first reduced the rate of freight on cotton to Kobe for the Japanese spinners without our being aware of the fact. When this matter was brought to our knowledge we made representations on the subject to the Conference Lines, and it was only after a good deal of correspondence, and a great lapse of time, that they agreed to reduce the rates for us, at first for Shanghai and then for Hongkong. Considering our long connection with the Conference Lines (or at least with the majority of them), it is a matter for regret that they should have so overlooked our claim towards fair consideration at their hands. I am emphatically of opinion that the Mill industry of Bombay has been the main support of the China Line Steamer Companies for a great many years. The matter has, however, so far as this Association is concerned, ended satisfactorily, and our thanks are due to the P. and O. Company and the other lines for meeting us in the matter. With these remarks I have much pleasure in seconding the motion for the adoption of the annual report.

MR. VITHALDAS D. THACKERSEY.

Mr. Vithaldas Damodher Thackersey, in supporting the resolution, said :—After the able and comprehensive speeches of our Chairman and Vice-Chairman, little is left for me to say. I will therefore confine my remarks to only one point which is of great importance to us and equally so to Government. You are no doubt aware of the policy this Association has hitherto followed. Moderation is our motto. We have always willingly co-operated with Government on every occasion for the welfare of the cotton industry in India. We have never approached Government with any complaint without the very best reasons, and then only when compelled by pressing

necessity. The results of this wise policy are quite patent. Rarely have we gone to the Government of Bombay or to the Government of India without receiving that consideration, sympathy and even indulgence which a body like ours, representing a total capital outlay of nearly 15 crores, rightly deserves when acting thus judiciously. It may naturally occur to you that our protest against the unjust Cotton Excise Duty did not meet with such fair treatment. There is no doubt that India is treated very unjustly with regard to this tax, which presses so heavily upon our weaving industry. No one can deny that the interest of India, in this case at least, has been sold to the Lancashire manufacturers, who, according to Lord George Hamilton himself, are admitted to be very powerful, and whose support in Parliament the Conservative party cannot afford to lose. The Government of India themselves have never made a secret of this, but have indirectly admitted their inability to give us justice. But in the main this Association has uniformly been treated sympathetically by the Government. Now let me place another picture before you.

Waste of Time.

Those who have studied our annual reports of recent years, and particularly the last, cannot have failed to see how much time is wasted and unpleasantness created in discussing with the Collector questions which a man of practical experience would settle with little trouble. I do not blame the Collector who cannot be expected to understand the technical questions regarding our industry, and who must of necessity be guided by his subordinates. I am not speaking against the Factory Inspectors, who may be performing their duty according to their interpretation of the Act, but my complaint is against the general result of the administration. Let me give you a few instances. In 1898 it was notified by the Collector that the term boiler, as defined in Section 3 of the Bombay Boiler Inspection Act, included economizers, and all the provisions of the Boiler Act applied equally to economizers. We were therefore called upon to get our economizers examined. This interpretation seemed quite absurd to those who knew something about the position of economizers in the boiler house. We clearly pointed out that the official inspection of economizers would cause much inconvenience to mills and possibly loss of money without conferring any special benefit. A long correspondence ensued, and ultimately the Government of Bombay withdrew the notification.

Safety Valves of Boilers.

Then there is the question of sealing one of the safety valves of boilers by the Factory Inspector. So far as the anxiety for the proper supervision by the Factory Inspector is concerned, we have nothing to complain of, but such procedure would raise several difficulties which have been laid before the Collector, apparently without convincing him. We have lately received letters from the Manchester Steam Users Association and the Vulcan Boiler General Insurance Co., Ld., in which they clearly point out that not only is there no such system or law in the United Kingdom, but it would, in their opinion, be quite unnecessary. Only in case of British passenger steamers are safety valves locked up and the keys kept, not in the charge of the Inspector, but in charge of the Captain, who, in case of emergency, is always on the spot. We hope these facts will convince the Collector of the propriety of our objections. I will now refer to that much debated question of ventilation. Our Association has always been ready to do everything in its power to satisfactorily solve this most important and most difficult problem. Even in the United Kingdom this question has not been finally solved, and it is still under investigation by a Departmental Committee and the Board of Trade. But India, in the words of Lord Curzon, is a land of surprises. A question that years of investigation in England have not yet solved, was to be settled in India by a notice from the Collector, that Rule 5 of the Factory Act would be put in force—a rule which is utterly impracticable. If this rule is to be followed to the letter in a mule room, not only all the windows should be kept open, but the walls also must be pulled down before free ventilation, according to Rule 5, can be maintained. Fortunately this impracticability was admitted by the Collector before it was too late. A preliminary meeting between the Special Committee of our Association and the Collector was arranged, and now we are proceeding in a businesslike way.

Such instances can be multiplied indefinitely; but I will give you only one more which still engages the attention of our Committee, and I do not know how voluminous will be the file of correspondence before it will be finally settled. It is proposed by the Collector that each of our mills should employ an extra engineer for night duty. Throughout all these years we have, during the night time, kept our boilers in charge of experienced serangs with perfect satisfaction and without a single accident. These serangs, as we all know, have years of experience, and most of them, so far as their particular duty is concerned, are far better qualified than third class engineers. This proposal, if persisted in, will be an annual tax on our industry of nearly rupees two lakhs, which we hold to be quite unnecessary and even unjustifiable. Thus I have given you a fair idea how the valuable time of our Association and that of the principal Government officers is wasted in correspondence and much unpleasantness occasioned. It is not only in the administration of the Factory Act, but with regard to Custom administration that something should be done to have a continuity of policy, and that our industry or our trade should not be made a shuttlecock to be thrown backwards and forwards at the whim of individuals, who are too often changed. Even the Chamber of Commerce has felt the disadvantage of this lack of continuity, and has shown it in its ably worded and argumentative representation to Government. In administration of industry and trade, continuity of policy is as essential as in Political Government. Under the present Civil Service Rules, where promotions, furloughs and other considerations are paramount, such continuity of policy is nearly impossible. Either the recommendation of the Chamber of Commerce to create a separate service for the customs and thus secure these responsible posts to men of special commercial training should be accepted, or the Government should create an advisory board formed principally of the mercantile people with definite powers. A continuity in the administration would thus be established. A good deal of unnecessary correspondence would be saved, even unpleasantness avoided, and the administrators and merchants would reap the benefit. (Applause.)

MR. D. E. WACHA.

Mr. D. E. Wacha, in supporting the motion, said:—Our report is exhaustive enough, and is conclusive evidence of the substantial work transacted last year in the interests of the general body of millowners. It also bears evidence of the ability with which each important question has been handled and elaborated by our secretary whose assiduity is beyond praise. You have already noticed that the report deals with both internal and external topics. I mean those which relate to our own domestic economy and those which we have had to deal in consequence of foreign correspondence, including communications from official authorities. On some of these previous speakers have already drawn your attention, but it may not be out of order to refer to some others. It is evident that the proposals of a variety of character on ventilation, boilers, engines, fencing of machinery and so forth are continually cropping up. In reference to all these it would seem there is very imperfect knowledge on the part of those suggesting them. And it often becomes a difficult question for your Committee to dispel ignorance, furnish exact information, and above all to contend the inutility in certain cases of insisting upon nostrums wholly unsuited to Indian factory conditions. In all these respects, as well as on the commercial section connected with the cotton trade, it would be a great advance to have in our midst a small body of experts who could advise the authorities on all matters touching the well-being of factories. The time is ripe for moving the Government to institute such an advisory board, which I doubt not will prove of the greatest satisfaction—millowners will be at all times prepared to carry out all reasonable suggestions made by the constituted authorities. But the evil is that these authorities are fugitive. There is no continuity of knowledge and experience. This makes it difficult for the Government to recognise to its fullest extent the practical difficulties which, oftener than not, are to be met with in the way of the adoption of proposals which may have been crude or undefected, or but imperfectly understood. While a good deal of unnecessary correspondence will be avoided, there will be a greater despatch and more satisfactory solution of difficult problems.

Fiscal Projects.

Other external matters have reference to the fiscal projects of the Imperial authorities and to the policy now and again adopted by the great shipping companies which convey our goods to different ports. Both, by reason of the power and influence they possess, are unmitigated monopolists. As a result, millowners have to submit, despite all fair and reasonable protests and remonstrances to the caprice of these monopolists. Their arbitrary action has to be endured which is indeed grievous. The Imperial authorities in their relation to cotton manufactures have for the last eight years adopted a policy which, in its effect, is not only unjust and oppressive but solely continued in class interests. In its incidence the Excise Duty is worse than the Income Tax, for while the last tax profits the first tax capital when there are no profits to speak of but an actual loss. As to the shipping companies they are masters of the situation, and so long as unity and strength are absent to break down their monopoly, their oppressive policy of freight will have to be endured, though they have of late been somewhat more merciful. To me, personally, it seems humiliating that millowners should be so far wanting in public spirit and enterprise as to be unable, in their own best interests, to defeat the existing combination. For, Mr. Chairman, it should be remembered that the time is not far distant when keener rivalry in the yarn trade in the Far East will necessitate a searching review of the present entire economic position of our mills. It will be a short-sighted policy which will neglect to seize time by the forelock and prepare for the contingency.

Supply of Raw Staple.

Coming to the internal factors, the most important is the supply of the raw staple. It is a matter of profound regret that while year after year passes by, not the slightest effort is made to improve the growing deterioration in the quality of medium and long stapled cotton. An organised effort on a small and unambitious scale, as an initial measure, is highly desirable. There are no insuperable difficulties in the way. But the cultivator needs all the support and encouragement which consumers and exporters can give in order to bring back that better quality of staple which was such an excellent feature in the trade in the eighties and in the early nineties. Too much stress need not be laid on this all-important point on which besides myself other speakers have at previous annual meetings drawn pointed attention. It will be hopeless to spin higher counts and weave finer cloths until the improvements in the raw staple takes place. Next the supply itself of the raw material needs to be well considered in view of future eventualities. For some years past the indigenous supply has been partly divided between India and Japan. The last is now a larger importer than all the continental ports and the United Kingdom. But if the report given out in the press some time ago be correct, there may be another colossal sharer in the annual supply of our cotton. An eminent local firm is said to have closed its business in Americans and is likely to invest its disengaged capital in Indian cotton. What effect may such a proposal, if carried out, have on our supply, it may be problematical to say.

To Be Forewarned.

But even here it is the counsel of perfection to be forewarned. It may be that cotton cultivation may extend in the near future, now that the effects of the two late famines are happily passing away, and that we may not feel the pinch which is the same thing as dear cotton and, therefore, a diminished margin of profit, or even none at all. Whether it will be so or not we must leave coming events to inform us. But our Association can certainly take a leaf out of the book of the Manchester organisation which is now rightly making efforts, in view of the latest developments of the American Cotton Trade, to become as far as practical somewhat independent of New York and Boston. I refrain from harping once more on the psychological part of our industry, which is also looming in the distance, and is destined one day or another to affect the margin of profits. Ravages of pestilence and the lamentable mortality arising from diseases of the respiratory organs have their own lessons to teach to us as far as our operations are concerned. In this connection it will indeed be a red-letter day in the annals of the Association when the correspondence going on for months past between the Improvement

Trust and the Committee takes a practical shape and the first block of chawls is built. For it is superfluous to state that whatever tends to improve the sanitary conditions of the dwelling places of our working classes is an economic gain of the highest value. As Mr. David has made special mention of the subject in his practical speech, I refrain from expatiating on it any more. That is one part of my parable under this head. The other is the apprehended scarcity of labour. It is a serious question on which the sooner the attention of millowners is riveted the better. In this connection I am glad that my suggestion for a provident fund for the operatives made at a previous meeting is recalled by Mr. David.

Local Cotton Industry.

Thus, sir, viewing the present situation of the local cotton industry from all points of view, external and internal, which have been confronting us for some years past, it seems to me that a severe self-introsection at this juncture will not be unwelcome. None will deny that the many elements to which I have referred are a source of anxiety to the trade, and it will depend on the practical sagacity we may bring to bear on their respective solution for our common interests, how far the industry will be prosperous in coming years. I am far from indulging in pessimism, but experience informs us how a callous and continuous disregard of existing conditions of an unsatisfactory character had led in the end to evil consequences. It would, therefore, be a part of wisdom to introspect ourselves, as suggested, if we are to succeed in avoiding those elements which now threaten the future prospects of the industry. One word more and I have done. I do not say anything on the subject of the disastrous effects on the spinning industry by the extreme dislocation of China exchange—neither is my inclination to say aught on the all absorbing topic of preferential tariffs to which reference has been made by our friend, Mr. David. As to the first, it will be sufficient to say that all artificial currency is doomed to failure, despite temporary success. But Bombay owes a great deal to Mr. J. A. Wadia for his initial agitation in the matter which has now been so well taken up by Sir Edward Sassoon in London.

Preferential Tariffs.

As to the preferential tariff controversy, it hardly falls within the scope of our report, but I must, all the same express my entire variance with the views propounded by Mr. David. It is my strong conviction that it will be an evil day when Indian interests come to be wholly subordinated to the policy of the self-governing Colonies. Their interests are in conflict with ours. Whatever may have been the causes which have unfortunately wrought the present economic evils in the country by reason of the trade policy of our rulers in the first half of the Nineteenth Century, we should carefully guard against the aggravation of the evil at the present hour. While admitting that protection, within certain well defined limitations and restrictions, is necessary for the protection of young industries in India, it would be, I repeat, an evil day when the first principles of free trade are superseded by the hollow plausibilities and shibboleths of the Imperial Protectionists. Preferential tariffs contemplated by Mr. Chamberlain's propaganda are liable to be destructive of a large portion of India's foreign trade. Not only are there wheels within wheels which will diminish that trade, but it will have a certain tendency to cripple the purchasing power of India, poor as it is, and, in the long run, embarrass the finances of the country, leading ultimately to enhanced taxation. And I take this opportunity to raise my warning voice against the dangerous experiment. With these words I beg to support the original motion. (Applause.)

OTHER RESOLUTIONS.

The following other resolutions were then passed :—

Proposed by the Chairman, and seconded by Mr. Sassoon J. David : " That the Rules and Regulations of the Association as revised by the Committee and circulated to members be approved and adopted ; and that in the " Rules applicable to all trade marks registered with the Association whether under the old or the new Rules, the letters (A), (B), (C) and (D) printed in error as designating the several Rules, be changed to the corresponding letters of the Greek Alphabet to prevent confusion with the set of Rules immediately preceding them."

Proposed by Mr. D. E. Wacha, and seconded by Mr. Manmohandas Ramjee : "That the following rules for the election of a representative of the Association on the Board of the Victoria Jubilee Technical Institute be approved and adopted :—1. Any member of the Association shall be eligible as Representative of the Association on the Board of the Victoria Jubilee Technical Institute. 2. The period of office of any elected Representative of the Association on the Board of the said Institute shall be one of three years. At the end of such period he shall retire but may be re-elected. 3. The appointment of the Association's Representative shall be made at a General Meeting of the Association, and such Representative shall *ex officio* be a member of the Committee of the Association. 4. In the event of the disqualification of the Association's Representative under Section 9 or 10 of the Rules and Regulations of the said Institute, or in the event of his decease or resignation of such Representative, or in event of his ceasing for any reason to be a member of the Association, the Committee shall appoint a successor who shall hold office up to that date at which the Representative whom he succeeds would, under Rule 2, have retired. 5. In the event of the absence of the Association's Representative from three or more consecutive meetings of the Board, or in the event of the Association's Representative's applying for leave of absence, the Committee may, if they think fit and with the consent of the Board of the said Institute, appoint a substitute, who shall hold office until the Representative whom he replaces, resumes attendance or up to that date at which the Representative whom he replaces would, under Rule 2, have retired."

Proposed by Mr. D. E. Wacha, and seconded by Mr. Narotum Morarji Goculdas : "That the Committee be empowered to pay from the Funds of the Association to the Victoria Jubilee Technical Institute the sum of Rs. 3,000 being the Association's donation for the year 1903-04.

THE NURSING FUND.

Mr. N. N. Wadia in proposing "that the Committee be empowered to pay from the Funds of the Association the sum of Rs. 500 as a contribution towards the Sir Jamsetjee Jeejeebhoy Hospital All Saints' Nursing Fund," said :—The position of the J. J. Hospital Nursing Fund gives them at present an average income of Rs. 2,000 per month. The average expenditure has been over Rs. 2,300 so they have been overdrawing the balance of the Fund by Rs. 300 per month. This figure of course is small and would be much bigger if it were not for the splendid and self-sacrificing work of All Saints' sisters, who so generously look after the Nurses and supervise the whole Nursing staff free. Even spending these Rs. 2,300 per month only 12 out of 24 wards are nursed at the hospital. The other 12 wards and the Eye Hospital are totally unnursed and are in charge of ward-boys and ayahs and so badly attended to, that only a casual visit by any person here to the different Wards will convince him of the difference in cleanliness of the Wards and the attention paid to the patients. This unsatisfactory state of matter was brought some time ago to the notice of Mrs. Crowe, and she, with her husband, Hon. Mr. Justice Crowe, has been able by a great deal of exertion and activity to gather together a sum of Rs. 1,16,000, which will give an income of Rs. 400 per month towards the Nursing Fund. Their splendid work needs little mention from me as it is well known to you. As the Government promised to contribute similarly, the total addition to the Fund would be about Rs. 800 per month. The estimated expenditure to nurse all the Wards fully from particulars given me by Mr. S. Reed, the Secretary, will be about Rs. 3,300, so the deficit after deducting the present income of Rs. 2,000 and the Rs. 800 from Mrs. Crowe's Fund and Government Grant will be about Rs. 400 to Rs. 500 per month, or, roughly, Rs. 6,000 a year, and as Government has pledged to contribute to all Nursing Funds a sum equal to that raised by private enterprise it is necessary therefore that Rs. 3,000 a year will have to be raised by private sources before the minimun requirements of the hospital can be supplied. This, gentlemen, is the position and your Committee after long discussion have resolved to recommend you to vote the modest sum of Rs. 500 towards it. It may be questioned by some of the members present here as to what claim on a body like our Association the Nursing Fund of the J. J. Hospital can have. Well, gentlemen, the answer to this is very simple. From statistics I have learned that out of the total of about 36,342 patients, there were last year treated in the hospital, 3,173 patients, who are mill hands, and this figure does not take into account the families of the mill hands, who are also treated there. You will see

therefore that the percentage of mill hands treated is something like 10 per cent. This figure, I am given to understand, is very low as it is very difficult at times to ascertain the nature of the patients when they come to hospital.

Secondly, gentlemen, all our Bombay mills specially are situated in the north of the island, and Sir J. J. Hospital is used by all the mills in case of accidents to the mill hands. We, millowners, are doing far too little, considering the amount of work we get of our workmen, towards their comfort and looking after them in their time of trouble and sickness. I know there are few enterprising mills, who have got dispensaries at their mills, and by getting a doctor to attend at the mill for the period of the day to see those of their mill hands, who have been ill and prescribe for them, they, to a certain extent, carry out the duty they owe to them, but there are only very few mills like this, and it is to be regretted that the bulk of the mills do not do anything to look after their workmen in case of their illness. I know in the present state of the industry millowners are unable to spend lavish sums for this object, but nobody demands that of them, but if they will take little interest and support the existing institutions like the J. J. Hospital by a small contribution, however small it may be, they will materially help to lighten the burden and make the work of treating the sick at the various hospitals so much easier by putting the fund on a more or less better footing. Just let us consider, we, millowners, employ 86,000 hands in Bombay and if a contribution of annas four per head per year were subscribed by the millowners, it will realize something like Rs. 22,000 a year, and this sum will be ample not only to put the Nursing Fund at the J. J. Hospital but other hospitals on a sound basis, and the amount given out by each millowner would not be felt very much by each individual mill as an employer of 1,200 hands will only pay Rs. 300 per year. I need not mention that a much bigger sum than this is very often left with the millowners for unclaimed wages and fines of workmen which I think should by right be used for the benefit. I only throw out this suggestion and I hope our millowners, as business-men, will take up this suggestion and give their consideration and support. I think I have said sufficient to prove the claim the J. J. Hospital Nursing Fund has on a body like ours. The contribution, in my opinion, the Committee recommend you to-day is far too small and I should myself have liked to have seen even a bigger donation given.

The proposition was seconded by Mr. Jehangir Bomanji Petit and passed.

THE NEW COMMITTEE.

The following resolution, proposed by Mr. Narotam Morarji Goculdas, and seconded by Mr. Jehanghir B. Petit, was passed: "That Mr. Bomonjee Dinshaw Petit be elected Chairman, and Mr. Sassoon J. David, Deputy-Chairman of the Bombay Millowners' Association for the year 1903, and that the Committee for the same period be composed as follows:—Messrs. S. A. Nathan, Ahmedbhoy Hubibbhoy, Dinshaw E. Wacha, N. N. Wadia, W. H. Brady, Gordhandas Khattau, Manmohandas Ramjee, Sir Dinshaw M. Petit, Messrs. D. J. Tata, D. C. Shroff, Vithaldas Damodhar Thackersey, Jamshedjee Ardaseer Wadia, Sir J. Cowasjee Jehangir, Messrs. Goculdas Naranjee, Fazulbhoy Currimbhoy Ebrahim, H. E. E. Procter and Herbert R. Greaves."

It was resolved that Mr. Nusserwanjee Sorabjee Jamsetjee be re-elected auditor of the Association's Accounts for the year 1903, and that his remuneration be Rs. 100 per annum.

A vote of thanks to the Chairman concluded the business of the meeting.

NEW MARKET FOR COTTON GOODS.

Extract from the Diplomatic and Consular Report on the Trade of Constantinople for the year 1902 :—

INDIAN TRADE IN COTTON YARN.

"Several enquiries have been addressed to this Consulate from India with respect to the opening for competition in this trade. The following notes were supplied by merchants here in reply :—

'The Bombay make of yarns is not suitable for this market. They are too feeble and soft. The Bombay spinners, if they thought it worth while, could make yarns to suit this

market in the lower numbers, that is, 8's to 12's. In the finer numbers, 14 to 24, the Indian Cotton is not long enough, and Italian and Manchester yarns are preferred. The only Bombay spinners that have as yet accommodated themselves to the wants of this market are Swadeshi Mills Co., Ld., and their yarns are now being sold in Turkey. These can be sold here to-day (October 1902) at the following prices, *c.i.f.*, Constantinople; 4's at $5\frac{1}{16}d.$; 6's at $5\frac{1}{8}d.$; 8's at $5\frac{1}{4}d.$; 10's at $5\frac{9}{16}d.$; 12's at $6d.$ These prices are in sterling, and include a local commission and brokerage; 5,000 or 6,000 bales per annum might be sold, perhaps more, if credits were given as the Italians give it.' Another local firm says :—' Course counts of 4's to 12's of what is commonly called here water twist, but really may be called mock twist, are in great demand. Italian spinners have absorbed nine-tenths of the once flourishing Lancashire spinning owing mainly to their cheapness and better terms. Nevertheless these Levant markets are a tempting field for the Indian spinner, as cheap yarns are in great request. I have heard of trial orders of 4,000 to 5,000 lbs. bundles placed with Indian spinners in these coarser counts, and frequent consignments of 400 to 500 bales (of 40 bundles) have lately reached this port in transit, chiefly for the interior of Asiatic Turkey. The current price lately for Indian Mock twist in 4's to 12's was $5\frac{9}{16}d.$ per lb., *c.i.f.*, Constantinople, prompt cash terms, *i.e.*, against full shipping documents on arrival of goods. I must draw the Indian spinners' special attention to the fact that the Indian yarns are too soft spun, and should be spun on the hard side. Extra hard yarns in low, medium and fine counts are likewise in immense demand in Turkey, and the Italians have, these last years, secured the bulk of it. I have heard of an Indian imitation of extra hard yarns in low counts, which, I regret to say, turned out very uneven, being tender or wanting in strength, probably through fault in the mixing and sizing of cotton. The trade from Bombay and Calcutta stands a poor chance of making great strides in this country against Italian competition owing to terms of payment. If, instead of cash on arrival, the Indian spinners would adopt Italian methods, *i.e.*, giving certain facilities by accepting first class three to four month trade bills, then and then only, could they expect to reap the benefit of a tremendous expansion of business. The firms in the trade have, as a rule, branch establishments in Manchester, and their drafts are drawn upon them, but always made payable in London at first class banking houses, and therefore such bills could very easily be negotiated or discounted at once. Some merchants are houses of old standing : 20, 30 to 50 years or more, and none has so far failed to carry out its obligations. The business would be done with such firms as show the minimum risk. I have heard of lines from 20,000 to 40,000 bundles that could be placed by contract, if the Italian terms of payment were adopted. We likewise are in a position to establish sub-agencies in Greece and Bulgaria, both yarn-consuming countries, or in the other centres of Turkey, such as Smyrna and Salonica. Spinners should state their terms and conditions, and furnish us with a very large supply of cloth and yarn samples, by post, if possible. Indian spinners desiring to be placed in communication with reliable agents here, or wishing for further information, may write to this Consulate, where every effort will be made to assist them. It is not advisable to send consignments without good references.

STATISTICS.

Appendix J.

STATEMENT of Imports of Piece-Goods (Grey, Bleached, Coloured and Printed) and of Yarns (Grey and Dyed) from Great Britain into Bombay, Calcutta and Madras, from the year 1851 *to* 1902, *both inclusive.*

Year.	Piece-Goods.			Yarns.		
	Bombay.	Calcutta.	Madras.	Bombay.	Calcutta.	Madras.
	Yards.	Yards.	Yards.	Lbs.	Lbs.	Lbs.
1851	116,351,747	213,757,342	3,712,729	6,384,321	18,281,592	1,289,835
1852	113,567,856	163,851,027	3,731,934	5,681,870	13,946,539	1,503,000
1853	130,838,032	172,098,876	8,038,050	6,849,463	15,350,537	2,068,994
1854	192,200,419	271,208,527	8,695,054	7,668,093	15,650,107	1,946,584
1855	128,193,027	256,069,194	6,542,924	7,447,529	16,901,310	2,107,969
1856	130,459,853	275,016,345	4,517,561	4,559,670	15,224,557	1,923,999
1857	137,761,636	235,190,273	9,375,347	2,838,644	10,691,863	2,370,741
1858	281,836,364	416,362,074	15,431,647	8,744,517	18,369,490	4,036,325
1859	307,086,509	520,899,016	20,425,632	12,899,875	20,043,485	5,741,441
1860	267,443,986	403,351,123	20,648,072	4,571,134	16,641,847	5,656,930
1861	272,573,717	418,671,687	14,628,188	5,578,828	13,933,256	3,694,985
1862	178,803,604	295,508,637	9,748,215	4,811,384	9,594,896	1,675,239
1863	232,321,038	234,645,916	16,352,677	5,592,995	10,394,931	3,702,562
1864	189,812,984	223,036,538	14,787,062	4,268,662	8,742,699	3,447,635
1865	175,486,677	319,047,954	17,291,103	4,073,811	6,981,809	2,232,948
1866	243,476,368	351,572,331	22,081,805	6,877,968	10,795,517	4,629,986
1867	316,784,109	528,434,956	23,258,498	6,568,619	13,006,019	4,684,638
1868	555,337,050	619,101,683	31,793,397	7,780,303	13,236,453	6,873,398
1869	296,158,439	518,741,346	29,683,469	7,981,949	11,858,210	7,773,636
1870	272,898,226	687,639,911	45,750,099	9,946,299	16,816,936	8,649,598
1871	305,416,233	684,926,367	47,560,133	6,097,531	12,041,848	6,876,841
1872	262,849,273	657,123,291	48,177,871	6,163,813	11,490,636	8,616,040
1873	349,631,830	664,987,114	57,666,809	8,667,090	11,192,248	8,918,841
1874	292,843,697	765,762,164	49,878,834	8,867,978	14,041,520	10,510,639
1875	305,917,934	744,439,224	44,683,288	6,863,763	12,945,102	10,104,020
1876	356,940,508	733,913,330	54,875,423	8,246,211	12,090,167	9,664,609
1877	354,779,192	885,688,850	39,106,318	10,624,710	14,364,841	8,683,595
1878	344,068,807	749,233,431	47,038,579	7,754,005	13,967,396	8,373,916
1879	343,811,233	788,759,250	61,375,691	7,469,113	10,580,436	9,581,363
1880	531,050,559	1,007,531,497	77,010,037	13,024,923	16,446,089	12,108,002
1881	544,890,697	947,329,460	82,451,852	12,326,706	13,597,371	11,099,762
1882	500,248,293	883,611,784	106,615,818	12,019,123	14,780,667	13,069,871
1883	572,738,196	878,949,353	107,868,579	16,220,463	13,478,764	11,033,824
1884	568,220,318	908,294,475	120,841,003	14,299,380	15,313,840	13,114,875
1885	547,773,459	911,987,148	93,757,204	14,132,372	13,473,067	9,597,197
1886	700,061,881	1,159,407,968	143,318,736	17,087,709	14,177,149	13,937,810
1887	585,502,258	988,370,500	117,502,619	14,990,151	14,040,137	13,432,638
1888	652,344,548	1,045,951,384	138,271,060	16,595,176	14,778,545	14,570,258
1889	634,608,171	1,031,000,980	144,140,943	13,011,348	11,836,681	13,393,848
1890	665,550,786	1,037,911,379	115,224,797	15,805,515	12,455,601	13,284,690
1891	572,065,309	961,686,226	108,083,576	15,526,869	12,484,617	14,666,189
1892	548,944,867	1,013,742,658	93,892,712	12,427,053	10,108,327	10,390,439
1893	604,439,138	1,009,441,511	106,086,291	10,466,233	13,124,097	11,387,889
1894	719,324,449	1,161,138,343	140,749,235	11,723,808	10,529,734	12,547,763
1895	484,780,087	925,203,136	99,427,366	10,857,586	10,689,066	10,188,466
1896	574,410,316	1,163,967,702	86,265,292	11,649,977	13,403,663	15,402,931
1897	472,597,133	932,328,974	121,396,515	11,788,246	13,299,211	13,650,022
1898	557,557,951	1,202,254,978	91,950,978	10,238,969	11,412,068	11,673,678
1899	611,556,220	1,266,926,546	93,492,746	10,441,484	10,729,842	11,532,812
1900	461,938,302	1,086,463,274	120,383,837	5,892,081	9,435,371	9,496,085
1901	629,976,200	1,127,753,500	129,392,500	7,911,750	11,050,890	9,564,200
1902	475,541,800	1,176,051,500	119,878,000	6,299,820	7,411,640	9,438,560

ANNUAL IMPORTS FROM EUROPE INTO BOMBAY OF PIECE-GOODS AND YARNS FROM 1ST JANUARY 1893 TO 31ST DECEMBER 1902.

DESCRIPTION OF GOODS.	From 1st Jan. to 31st Dec. 1893.	From 1st Jan. to 31st Dec. 1894.	From 1st Jan. to 31st Dec. 1895.	From 1st Jan. to 31st Dec. 1896.	From 1st Jan. to 31st Dec. 1897.	From 1st Jan. to 31st Dec. 1898.	From 1st Jan. to 31st Dec. 1899.	From 1st Jan. to 31st Dec. 1900.	From 1st Jan. to 31st Dec. 1901.	From 1st Jan. to 31st Dec. 1902.
GREY GOODS.										
36 in. & under × 37/9 yds. Shirtings	Pcs. 18,02,879	Pcs. 18,23,643	Pcs. 14,28,336	Pcs. 13,21,463	Pcs. 8,05,059	Pcs. 10,73,940	Pcs. 9,39,757	Pcs. 5,91,977	Pcs. 7,69,487	Pcs. 4,64,790
37/9 „ do. do. 5½ lbs. & under ...	„ 6,450	„ 1,748	„ 4,261	„ 6,295	„ 7,972	„ 22,838	„ 24,744	„ 21,859	„ 14,577	„ 3,739
„ „ do. do. 6½ lbs. do. ...	„ 90,805	„ 79,228	„ 36,712	„ 52,827	„ 18,288	„ 15,210	„ 29,864	„ 79,251	„ 1,00,120	„ 78,905
„ „ do. do. 7 lbs. do. ...	„ 2,89,028	„ 2,94,931	„ 1,97,528	„ 1,49,644	„ 1,98,749	„ 1,64,387	„ 1,36,755	„ 1,16,975	„ 65,324	„ 73,162
„ „ do. do. 7½ lbs. do. ...	„ 1,18,950	„ 72,789	„ 2,21,380	„ 94,551	„ 2,20,012	„ 2,03,547	„ 1,73,723	„ 1,04,626	„ 88,196	„ 91,745
„ „ do. do. 8½ lbs. do. ...	„ 4,76,383	„ 4,87,822	„ 4,22,943	„ 2,65,195	„ 5,16,622	„ 6,23,056	„ 7,97,166	„ 3,61,514	„ 5,47,143	„ 4,31,428
„ „ do. do. 9 lbs. do. ...	„ 1,03,992	„ 91,207	„ 1,73,177	„ 1,03,791	„ 1,42,860	„ 1,80,306	„ 2,50,113	„ 88,968	„ 1,53,624	„ 2,46,386
„ „ do. do. above 9 lbs.	„ 91,990	„ 94,264	„ 73,246	„ 1,25,327	„ 1,26,773	„ 1,09,057	„ 1,82,570	„ 80,638	„ 75,154	„ 87,057
40/5 „ do. do. 6 lbs. & under ...	„ 2,150	„	„	„	„	„	„	„	„ 150	„ .....
„ „ do. do. 7 lbs. do. ...	„ 6,262	„ 12,332	„ 2,471	„ 659	„	„ 836	„	„ 1,097	„ 5,196	„ 3,978
„ „ do. do. 8 lbs. do. ...	„ 2,29,892	„ 2,68,205	„ 2,49,805	„ 1,79,933	„ 2,40,769	„ 2,05,787	„ 2,07,727	„ 2,14,494	„ 2,13,340	„ 1,97,725
„ „ do. do. 9 lbs. do. ...	„ 1,71,876	„ 2,00,875	„ 1,89,623	„ 1,16,073	„ 1,62,045	„ 1,32,565	„ 2,09,156	„ 1,90,600	„ 2,62,940	„ 1,95,422
„ „ do. do. above 9 lbs.	„ 2,97,128	„ 3,99,545	„ 3,21,020	„ 2,60,557	„ 2,81,002	„ 3,07,547	„ 4,07,316	„ 1,89,229	„ 4,00,422	„ 3,99,897
46/49 „ do. do. all weights ...	„ 3,60,107	„ 4,33,517	„ 3,65,656	„ 3,11,074	„ 3,31,244	„ 3,70,956	„ 4,22,409	„ 2,03,655	„ 2,51,397	„ 1,90,869
50/52 „ do. do. do. ...	„ 1,02,168	„ 1,16,712	„ 84,269	„ 65,167	„ 1,07,337	„ 1,02,413	„ 1,13,286	„ 58,163	„ 81,625	„ 61,739
53/60 „ do. do. do. ...	„ 44,581	„ 58,426	„ 55,401	„ 55,455	„ 47,866	„ 51,575	„ 91,691	„ 70,345	„ 73,892	„ 91,002
All widths × 23/24 yds. T. Cloths 4 lbs. & under ...	„ 3,194	„ 888	„ 537	„	„	„	„	„	„	„ .....
„ do. do. 5 lbs.	„ 1,009	„	„ 46	„	„	„ 200	„ 100	„	„ 200	„ .....
„ do. do. 6 lbs.	„ 3,305	„ 1,930	„ 5,264	„ 779	„ 279	„ 502	„ 2,711	„	„ 1	„ 589
„ do. do. 7 lbs.	„ 2,61,442	„ 2,08,118	„ 2,65,484	„ 1,36,503	„ 1,42,037	„ 1,70,264	„ 1,79,453	„ 1,33,575	„ 2,79,014	„ 1,40,624
„ do. do. above 7 lbs.	„ 22,587	„ 19,359	„ 46,156	„ 41,606	„ 28,109	„ 30,199	„ 25,827	„ 11,510	„ 16,009	„ 1,410
29 in. & under × 22,24 yds. Madapollams 2½ lbs. & under.	„ 57,094	„ 2,12,342	„ 49,978	„ 20,033	„ 29,487	„ 46,957	„ 21,948	„ 20,677	„ 76,020	„ 21,135
„ do. do. 2½ lbs. & over.	„ 19,182	„ 70,628	„ 43,710	„ 29,355	„ 51,825	„ 61,107	„ 42,953	„ 27,355	„ 81,827	„ 19,226
30 32 in. do. do. 2½ lbs. & under.	„ 35,346	„ 14,577	„ 1,950	„	„ 3,647	„	„	„ 3,999	„	„ .....
„ do. do. 2¾ lbs. & over.	„ 1,60,503	„ 2,27,388	„ 83,949	„ 39,475	„ 29,943	„ 30,275	„ 25,740	„ 13,647	„ 18,015	„ 15,231
38/42 in. do. do. 3 to 4½ lbs. ...	„ 1,63,742	„ 1,30,060	„ 54,640	„ 16,422	„ 43,161	„ 15,784	„ 4,020	„ 7,976	„ 92,661	„ 22,228
43 in. & over do. do. 4½ to 6½ lbs. ...	„ 2,42,309	„ 4,17,354	„ 1,85,136	„ 1,12,756	„ 1,48,344	„ 2,17,568	„ 1,94,602	„ 1,78,886	„ 2,49,440	„ 1,29,379
18 24 in. × 28,30 yds.* Printers 2 to 3 lbs. ...	„ 1,19,538	„ 3,66,637	„ 1,44,056	„ 14,206	„ 18,065	„ 58,316	„ 61,238	„ 5,701	„ 39,147	„ 5,085
Above 24 in. × do. do. above 3 lbs.	„ 14,224	„ 18,127	„ 37,106	„ 31,376	„ 22,450	„ 16,103	„ 14,306	„	„ 4,410	„ 11,624
34 to 45 in. × 18 20 yds. Jacconets, all weights	„ 8,73,579	„ 13,08,222	„ 7,14,810	„ 5,95,975	„ 5,79,630	„ 5,62,372	„ 5,65,623	„ 2,98,347	„ 6,86,642	„ 2,49,179
44 in. × 22 yds. do. do.	„ 2,95,969	„ 5,00,241	„ 3,21,674	„ 2,92,669	„ 4,47,745	„ 3,58,723	„ 3,69,167	„ 3,94,145	„ 4,48,521	„ 3,16,021
Above 44 in. × 22 yds. do. do.	„ 3,35,015	„ 4,73,279	„ 4,16,377	„ 4,15,486	„ 3,80,447	„ 5,26,500	„ 3,89,181	„ 4,60,181	„ 3,73,994	„ 4,54,723
36/9 in. × 18 to 22 yds. Mulls do.	„ 7,19,316	„ 8,50,243	„ 3,42,753	„ 2,40,674	„ 4,06,853	„ 4,65,478	„ 3,68,803	„ 5,10,841	„ 5,87,191	„ 3,23,519
40 42 in. × 19 20 yds. do. do.	„ 1,06,678	„ 2,50,151	„ 1,92,140	„ 1,60,556	„ 2,34,099	„ 1,50,314	„ 1,03,585	„ 1,69,994	„ 1,82,876	„ 79,112
Above 43 in. × 19/20 yds. do. do.	„ 44,864	„ 71,712	„ 71,563	„ 45,480	„ 61,369	„ 22,982	„ 15,991	„ 55,555	„ 63,386	„ 21,918
Domestics	„ 1,018	„ 349	„ 478	„	„	„	„	„	„	„ .....
Longcloths	„ 60	„ 1,697	„ 388	„	„	„	„	„	„	„ .....
Twills and Drills	„ 3,21,484	„ 3,39,873	„ 2,86,789	„ 3,51,470	„ 3,28,264	„ 3,39,317	„ 4,01,156	„ 3,37,218	„ 3,67,714	„ 2,98,942
Dimities or Spots	„	„	„ 167	„	„	„	„	„	„	„ .....
Chudders	„ 297	„ 2,414	„ 2,171	„	„	„	„	„	„	„ .....
Total for 12 Months	Ps. 79,98,087	Ps. 99,25,833	Ps. 70,93,150	Ps. 56,52,882	Ps. 61,62,341	Ps. 66,36,981	Ps. 67,72,681	Ps. 50,02,998	Ps. 66,69,655	Ps. 47,26,439

* Printers of 60 yds. are entered in the equivalent of 30-yd. pieces, and similarly with T. Cloths of 48, 72 and 96 yards.

DESCRIPTION OF GOODS.	From 1st Jan. to 31st Dec. 1893.	From 1st Jan. to 31st Dec. 1894.	From 1st Jan. to 31st Dec. 1895.	From 1st Jan. to 31st Dec. 1896.	From 1st Jan. to 31st Dec. 1897.	From 1st Jan. to 31st Dec. 1898.	From 1st Jan. to 31st Dec. 1899.	From 1st Jan. to 31st Dec. 1900.	From 1st Jan. to 31st Dec. 1901.	From 1st Jan. to 31st Dec. 1902.
WHITE GOODS.										
28/36 in. × 39/42 yds. Shirtings and Longcloths	Pcs. 5,47,275	Pcs. 6,01,797	Pcs. 4,84,245	Pcs. 7,03,249	Pcs. 4,51,298	Pcs. 5,35,152	Pcs. 6,66,078	Pcs. 5,18,993	Pcs. 8,90,909	Pcs. 5,65,083
28/39 in. × 18/20 yds. Jacconets	„ 7,91,996	„ 10,88,567	„ 4,91,891	„ } 6,15,049	„ 4,28,556	„ 5,28,703	„ 3,43,240	„ 2,52,772	„ 5,17,724	„ 1,79,628
40 in. & wider „ do.	„ 67,040	„ 1,03,140	„ 39,271							
26/39 in. × „ Mulls and Nainsooks	„ 30,15,866	„ 45,59,694	„ 34,88,001	„ 37,77,257	„ 39,97,687	„ 48,29,693	„ 47,18,140	„ 42,49,615	„ 51,10,352	„ 37,90,090
40/45 in. × „ do. do.	„ 2,79,638	„ 5,94,947	„ 3,77,604	„ 4,91,478	„ 5,98,200	„ 7,53,189	„ 10,21,754	„ 10,71,745	„ 14,79,168	„ 8,36,093
46 in. and upwards do. do.	„ 4,24,836	„ 7,45,468	„ 6,04,937	„ 8,34,631	„ 7,10,017	„ 8,54,263	„ 9,06,600	„ 8,49,067	„ 12,47,332	„ 9,74,576
32 to 42 in. × 12 yds. Cambrics	„ 22,681	„ 31,263	„ 20,951	„ 15,906	„ 10,395	„ 5,834	„ 6,936	„ 2,648	„ 17,841	„ 20,466
Twills and Drills	„ 55,131	„ 41,987	„ 39,498	„ 70,657	„ 34,710	„ 46,324	„ 56,820	„ 72,178	„ 1,22,154	„ 48,147
Total for 12 months ...	Ps. 52,04,463	Ps. 77,66,863	Ps. 55,46,398	Ps. 65,08,227	Ps. 62,30,863	Ps. 75,53,158	Ps. 77,19,568	Ps. 70,17,018	Ps. 93,85,480	Ps. 64,14,083
TURKEY RED GOODS.										
24 in. × 28 yds. Cambrics	Pcs. 4,33,286	Pcs. 5,36,977	Pcs. 2,98,312	Pcs. 3,30,750	Pcs. 1,96,536	Pcs. 3,42,264	Pcs. 6,36,650	Pcs. 2,38,797	Pcs. 2,49,783	Pcs. 3,23,222
32 in. × 24 yds. do.	„ 21,583	„ 29,765	„ 13,762	„ 28,326	„ 12,830	„ 19,593	„ 5,567	„ 4,469	„ 8,081	„ 5,971
All Widths and Lengths Shirtings	„ 2,64,912	„ 2,78,596	„ 2,33,360	„ 2,67,750	„ 1,45,577	„ 2,02,246	„ 4,22,816	„ 1,34,765	„ 2,75,846	„ 2,66,151
30 in. and over × 19/20 yds. Mulls	„ 1,09,460	„ 72,500	„ 60,693	„ 93,006	„ 25,677	„ 27,839	„ 63,267	„ 22,737	„ 59,484	„ 29,209
Do. do. Jacconets	„ 30,974	„ 35,146	„ 14,187	„ 21,678	„ 12,990	„ 17,128	„ 13,121	„ 4,043	„ 8,271	„ 15,719
All widths and lengths, Twills and Dimities	„ 50,700	„ 44,939	„ 59,024	„ 37,145	„ 25,101	„ 19,137	„ 26,759	„ 15,607	„ 29,971	„ 17,938
33/39 in. × 9/12 yds. Lappets	„ 7,942	„ 12,429	„ 7,683	„ 10,210	„ 14,190	„ 4,075	„ 2,590	„ 731	„ 1,761	„ .....
30 in. and over × 19/20 yds. Mull Stripes	„ 11,878	„ 12,138	„ 12,091	„ 7,579	„ 2,396	„ 4,837	„ 4,283	„ 5,483	„ 1,700	„ 1,680
All widths and lengths, Prints and Chintz	„ 3,44,243	„ 4,52,980	„ 2,50,924	„ 3,05,339	„ 2,48,178	„ 6,26,193	„ 6,68,042	„ 3,79,964	„ 3,72,526	„ 6,51,843
30 in. & over × 20 yds. Printed Jacconets	„ 1,23,512	„ 1,04,221	„ 1,11,657	„ 1,58,856	„ 1,04,619	„ 1,35,463	„ 1,84,673	„ 90,988	„ 1,99,009	„ 1,49,168
Scarfs and Sarries	„ 11,75,594	„ 7,40,603	„ 8,40,895	„ 10,00,902	„ 3,84,721	„ 10,54,914	„ 13,35,883	„ 7,01,167	„ 7,04,926	„ 9,24,238
Bandanas or Handkerchiefs ...	„ 94,584	„ 1,03,409	„ 2,25,435	„ 1,96,977	„ 2,51,333	„ 3,70,075	„ 6,02,590	„ 3,16,242	„ 2,16,996	„ 2,26,159
Total for 12 months ...	Ps. 26,73,668	Ps. 24,23,703	Ps. 21,28,023	Ps. 24,58,518	Ps. 14,24,148	Ps. 28,33,764	Ps. 39,66,241	Ps. 19,14,993	Ps. 21,28,354	Ps. 26,11,298
WOOLLENS.										
Army Cloth	Yds. 3,47,797	Yds. 1,89,192	Yds. 1,87,721	Yds. 2,07,917	Yds. 96,586	Yds. 1,40,006	Yds. 2,58,859	Yds. 79,013	Yds. 2,24,213	Yds. 1,65,485
Spanish Stripes or Ladies' Cloth	„ 7,67,768	„ 7,76,868	„ 2,86,218	„ 2,14,504	„ 83,027	„ 1,70,105	„ 3,70,972	„ 1,26,698	„ 3,73,247	„ 1,62,519
Flannels	„ 18,34,686	„ 16,96,624	„ 20,15,024	„ 22,96,178	„ 11,77,910	„ 17,76,647	„ 22,19,994	„ 19,99,888	„ 34,81,908	„ 17,02,588
Broad Cloth	„ 2,26,854	„ 2,88,728	„ 1,82,683	„ 1,66,475	„ 70,023	„ 1,35,348	„ 1,93,842	„ 1,26,210	„ 2,33,655	„ 1,77,686
Alpacca, Merino, Italian, &c.	„ 8,14,874	„ 7,15,100	„ 7,63,892	„ 9,08,995	„ 4,93,283	„ 5,12,478	„ 4,60,876	„ 4,83,001	„ 8,88,739	„ 5,30,252
Union Cloth	„ 5,40,799	„ 2,46,863	„ 1,74,185	„ 1,59,757	„ 49,035	„ 56,269	„ 81,550	„ 57,247	„ 54,049	„ 30,758
Long Ells	„ 14,020	„ 41,455	„ 27,395	„ 3,840	„	„ 18,945	„ 3,360	„	„	„ .... .
All other Sorts	„ 34,51,577	„ 22,78,277	„ 27,20,062	„ 32,36,825	„ 15,25,720	„ 17,14,668	„ 34,11,375	„ 23,82,967	„ 37,23,077	„ 26,86,936
Total for 12 months ...	Yds. 79,98,375	Yds. 62,33,107	Yds 63,57,180	Yds. 71,94,491	Yds. 34,95,584	Yds. 45,24,486	Yds. 70,00,828	Yds. 52,55,024	Yds. 89,78,888	Yds. 54,56,224

DESCRIPTION OF GOODS.	From 1st Jan. to 31st Dec. 1893.	From 1st Jan. to 31st Dec. 1894.	From 1st Jan. to 31st Dec. 1895.	From 1st Jan. to 31st Dec. 1896.	From 1st Jan. to 31st Dec. 1897.	From 1st Jan. to 31st Dec. 1898.	From 1st Jan. to 31st Dec. 1899.	From 1st Jan. to 31st Dec. 1900.	From 1st Jan. to 31st Dec. 1901.	From 1st Jan. to 31st Dec. 1902.
FANCY GOODS.										
Dyed Shirtings	Pcs. 1,31,802	Pcs. 2,43,052	Pcs. 1,08,263	Pcs. 1,98,654	Pcs. 1,63,016	Pcs. 2,38,221	Pcs. 2,79,072	Pcs. 1,89,168	Pcs. 3,87,768	Pcs. 2,16,124
„ Madapollams or Cambrics	„ 1,11,112	„ 2,22,629	„ 55,177	„ 1,09,408	„ 99,478	„ 1,28,294	„ 1,12,913	„ 53,689	„ 98,016	„ 73,811
„ Mulls	„ 3,554	„	„ 117	„	„	„	„	„	„	„ .....
„ Jacconets	„ 34,947	„ 68,383	„ 19,952	„ 23,870	„ 26,556	„ 9,751	„ 5,924	„ 4,609	„ 12,672	„ 11,748
Prints and Chintz, all Widths and Lengths	„ 16,68,789	„ 19,43,064	„ 10,19,678	„ 13,87,624	„ 7,91,893	„ 14,50,566	„ 18,10,791	„ 8,85,291	„ 15,29,044	„ 13,41,706
Printed Muslins and Jacconets, all Widths and Lengths ...	„ 3,42,582	„ 5,94,043	„ 2,84,270	„ 4,46,004	„ 72,818	„ 1,11,370	„ 1,77,121	„ 82,782	„ 1,85,951	„ 1,22,952
Lappets, White	„ 1,25,003	„ 1,63,281	„ 1,30,314	„ 1,21,675	„ 79,291	„ 76,289	„ 94,219	„ 75,625	„ 88,882	„ 1,19,070
„ Coloured	„ 50,103	„ 62,240	„ 63,902	„ 69,586	„ 41,868	„ 20,048	„ 23,220	„ 18,751	„ 37,247	„ 28,358
Lappet and Lace Scarfs	„ 58,814	„ 65,515	„ 33,311	„ 53,414	„ 22,265	„ 24,044	„ 63,388	„ 40,733	„ 21,182	„ 38,184
Dhoties, Grey	„ 33,43,861	„ 44,88,320	„ 30,44,779	„ 36,27,489	„ 30,94,888	„ 27,71,211	„ 36,73,588	„ 13,29,728	„ 31,75,470	„ 30,46,064
„ Bleached	„ 4,44,267	„ 6,05,542	„ 5,40,275	„ 5,40,165	„ 4,11,254	„ 4,43,666	„ 4,37,520	„ 5,04,471	„ 8,04,952	„ 5,32,250
Scarfs and Sarries, Grey...	„ 3,34,016	„ 2,97,786	„ 1,83,629	„ 2,97,059	„ 2,44,584	„ 1,69,086	„ 2,16,222	„ 1,12,639	„ 1,14,355	„ 2,07,459
„ „ Bleached	„ 3,28,496	„ 5,47,422	„ 3,91,391	„ 5,17,573	„ 2,69,829	„ 3,36,091	„ 5,21,703	„ 4,13,435	„ 3,45,777	„ 4,17,921
„ „ Colored and Printed	„ 2,42,555	„ 3,96,854	„ 4,26,902	„ 4,50,978	„ 5,39,368	„ 3,69,867	„ 6,89,986	„ 6,62,041	„ 9,33,055	„ 11,17,132
Book Muslins	„ 1,40,348	„ 1,69,803	„ 1,12,922	„ 3,31,310	„ 1,34,480	„ 1,11,528	„ 1,66,611	„ 3,45,924	„ 5,04,356	„ 1,75,445
Gauze, Plain, Figured, Striped and Checked... ...	„ 2,08,777	„ 3,29,603	„ 1,83,525	„ 4,75,366	„ 2,70,923	„ 1,73,342	„ 4,08,525	„ 2,20,784	„ 5,73,543	„ 2,75,827
Doria and Mull Stripes	„ 11,17,939	„ 13,97,040	„ 10,05,337	„ 11,45,682	„ 7,31,873	„ 5,43,535	„ 7,37,922	„ 3,99,639	„ 9,29,273	„ 6,06,042
Cotton Ticks	„ 4,953	„ 2,764	„ 5,184	„ 6,353	„ 1,614	„ 2,477	„ 4,526	„ 1,950	„ 3,689	„ 3,104
Twills and Drills, Colored	„ 79,562	„ 72,311	„ 58,284	„ 63,099	„ 61,437	„ 78,723	„ 1,09,659	„ 76,158	„ 1,00,415	„ 91,828
Imitation Linen Dhoties and Sarries...	„ 51,817	„ 46,732	„ 27,028	„ 59,449	„ 21,735	„ 27,620	„ 33,713	„ 45,356	„ 67,209	„ 38,095
Embd. Muslins, Jacconets, and Scarfs (White) ...	„ 1,39,171	„ 1,75,816	„ 69,236	„ 1,33,276	„ 1,09,591	„ 1,35,715	„ 1,63,157	„ 1,54,620	„ 1,61,244	„ 2,10,796
33/36 in. 4 to 5 yards Khunds	„ 1,768	„	„	„	„	„	„	„	„	„ .....
30 in. × 12 yds. Nainsooks, Colored and Printed	„ 22,835	„ 17,199	„ 12,103	„ 11,367	„ 12,624	„ 1,872	„ 3,505	„ 3,797	„ 4,051	„ 5,639
Trouserings	„ 45,460	„ 33,111	„ 39,362	„ 54,533	„ 22,139	„ 33,667	„ 57,760	„ 23,628	„ 36,432	„ 39,724
Chequered Mulls	„ 12,339	„ 13,784	„	„	„	„	„	„	„	„ .....
Harwards, Oxfords, Zephyrs, &c.	„	„ 30,364	„ 42,614	„ 51,334	„ 17,420	„ 26,140	„ 42,801	„ 26,361	„ 29,856	„ 31,946
Satin	„	„ 78,484	„ 30,607	„ 80,903	„ 61,496	„ 51,770	„ 52,377	„ 47,785	„ 94,929	„ 55,649
Coatings	„	„	„ 14,191	„ 32,341	„ 31,821	„ 43,588	„ 81,649	„ 34,901	„ 37,377	„ 30,144
Italians	„	„	„	„ 34,946	„ 8,353	„ 28,573	„ 60,656	„ 33,555	„ 73,866	„ 34,583
Dimities, Brocades or Brilliants	„ 35,649	„ 53,037	„ 30,932	„ 89,312	„ 60,143	„ 57,994	„ 87,796	„ 61,206	„ 1,66,181	„ 79,263
Total for 12 months ...	Ps. 90,86,019	Ps.1,21,19,729	Ps. 79,33,305	Ps.1,04,12,769	Ps. 74,02,760	Ps. 74,65,053	Ps.1,01,16,224	Ps. 58,46,620	Ps.1,05,16,792	Ps. 87,51,174
Flannels, cotton Total for 12 months ...	yds. * ...	yds. * ...	yds. * ...	yds. * ...	yds. * ...	yds. * ...	yds. 83,39,803	yds. 39,35,533	yds. 42,52,682	yds. 27,09,853
Nets Do. ...	„ 17,92,893	„ 17,53,199	„ 12,64,368	„ 18,48,229	„ 11,26,765	„ 11,27,697	„ 23,76,906	„ 17,73,409	„ 10,87,700	„ 14,84,050
Handkerchiefs, White Do. ...	doz. 1,28,427	doz. 94,857	doz. 1,18,574	doz. 1,93,789	doz. 1,12,134	doz. 1,17,701	doz. 1,08,978	doz. 85,871	doz. 1,37,784	doz. 1,30,535
„ Printed Do. ...	„ 8,48,332	„ 7,30,297	„ 7,30,226	„ 6,46,876	„ 3,16,254	„ 2,37,241	„ 6,67,134	„ 1,78,687	„ 2,62,142	„ 2,42,087

* Not recorded.

DESCRIPTION OF GOODS.	From 1st Jan. to 31st Dec. 1893.	From 1st Jan. to 31st Dec. 1894.	From 1st Jan. to 31st Dec. 1895.	From 1st Jan. to 31st Dec. 1896.	From 1st Jan. to 31st Dec. 1897.	From 1st Jan. to 31st Dec. 1898.	From 1st Jan. to 31st Dec. 1899.	From 1st Jan. to 31st Dec. 1900.	From 1st Jan. to 31st Dec. 1901.	From 1st Jan. to 31st Dec. 1893.
YARNS.										
Grey Mule and Medio, 10/24's say 20's	lbs. 400	lbs. 280	lbs. 900	lbs. 20,140	lbs. 2,005	lbs. 1,709	lbs. 19,987	lbs. 15,664	lbs. ...	lbs. 620
" " 26/32's " 30's	" 6,70,660	" 6,52,005	" 7,83,400	" 7,67,318	" 10,77,722	" 19,21,416	" 17,03,508	" 6,82,505	" 8,17,599	" 7,20,761
" " 34/42's " 40's	" 6,63,999	" 9,84,490	" 13,65,527	" 17,54,984	" 12,11,967	" 14,02,827	" 18,86,137	" 3,97,230	" 9,05,630	" 8,30,974
" " 44/52's " 50's	" 4,92,155	" 5,60,289	" 6,59,523	" 8,14,011	" 4,95,792	" 3,20,475	" 4,93,046	" 2,44,513	" 4,12,505	" 3,32,799
" " 54/60's " 60's	" 2,97,031	" 3,96,712	" 2,82,903	" 5,80,556	" 3,59,817	" 2,06,502	" 3,00,510	" 3,34,411	" 3,22,639	" 2,09,438
" " above 60's	" 58,524	" 99,382	" 50,002	" 1,26,751	" 1,34,088	" 1,43,613	" 1,29,261	" 2,28,727	" 1,61,932	" 2,02,568
Grey Water and Mock, 16/24's say 20's	" 8,100	" 14,464	" 6,000	" 9,000	" 6,650	" 3,000	" 3,600	" 8,100	" 4,500	" 12,900
" " 26/32's " 30's	" 21,03,369	" 34,88,370	" 33,36,916	" 34,53,975	" 38,70,442	" 40,04,735	" 29,88,843	" 16,90,962	" 20,68,073	" 12,57,392
" " 40's	" 3,09,540	" 5,54,708	" 6,54,840	" 6,19,647	" 6,23,365	" 5,04,926	" 7,14,431	" 3,93,163	" 6,48,320	" 5,19,689
" " above 40's	" 4,530	" 9,561	" 8,308	" 33,100	" 26,763	" 6,600	" 27,758	" 63,027	" 23,056	" 25,600
Total for 12 months (Grey Yarns)... ...	lbs. 46,08,308	lbs. 67,60,211	lbs. 71,48,319	lbs. 81,79,482	lbs. 78,08,611	lbs. 85,15,803	lbs. 82,67,081	lbs. 40,58,302	lbs. 53,64,254	lbs. 41,62,741
Bleached ... ... Total for 12 months ...	lbs. 4,99,883	lbs. 4,29,568	lbs. 5,00,767	lbs. 5,78,983	lbs. 4,26,951	lbs. 4,76,771	lbs. 4,99,549	lbs. 4,61,112	lbs. 7,34,656	lbs. 6,63,204
Turkey Red	lbs. 29,96,241	lbs. 19,70,988	lbs. 17,12,417	lbs. 18,61,219	lbs. 9,83,052	lbs. 12,06,649	lbs. 12,45,092	lbs. 6,07,437	lbs. 11,62,693	lbs. 8,50,286
Orange and Yellow	" 8,66,328	" 10,26,640	" 7,52,471	" 6,33,261	" 5,06,761	" 4,25,306	" 3,50,680	" 2,33,904	" 4,00,375	" 3,42,601
Green	" 4,07,429	" 4,91,980	" 4,28,769	" 3,70,531	" 2,83,050	" 1,73,300	" 2,26,522	" 43,650	" 1,25,200	" 1,14,248
Other Colours	" 19,018	" 11,414	" 5,047	" 21,232	" 7,438	" 11,999	" 22,831	" 27,519	" 33,174	" 30,287
Total for 12 months (Coloured Yarns)...	lbs. 42,89,016	lbs. 35,01,022	lbs. 28,98,704	lbs. 28,86,243	lbs. 17,82,301	lbs. 18,17,254	lbs. 18,45,125	lbs. 9,12,510	lbs. 17,21,442	lbs. 13,37,422
Total all Yarns...	lbs. 93,97,207	lbs. 1,06,90,801	lbs. 1,05,47,790	lbs. 1,16,44,708	lbs1,00,17,863	lbs1,08,09,828	lbs1,06,11,755	lbs. 54,31,924	lbs. 78,20,352	lbs. 61,63,367
SUNDRY.										
Coals (from Europe and Australia). Total for 12 months...	Tons 4,67,153	Tons 5,53,964	Tons 5,75,249	Tons 4,10,722	Tons 1,26,698	Tons 1,97,942	Tons 3,11,632	Tons 58,631	Tons 83,824	Tons 1,81,641
Coke (from Europe). Do. ...	" 5,113	" 4,444	" 4,251	" 7,368	" 5,268	" 5,126	" 6,102	" 3,355	" 5,960	" 2,018
Coals (from Japan) Do. ...	" *	" *	" 4,547	" 57,677	" 24,545	" 16,817	" 75,387	" 23,936	" 56,565	" 7,421
" (from Calcutta) Do. ...	" *	" *	" *	" 2,51,816	" 4,29,772	" 3,80,945	" 3,43,297	" 5,91,997	" 7,41,474	" 4,63,973

* Not recorded.

EXPORTS OF INDIAN MANUFACTURED PIECE-GOODS AND YARNS,

BY STEAMERS, SHIPS, AND NATIVE CRAFT.

From 1st January to 31st December 1902.

As per Export General Manifests.

TO	Grey and White Piece-Goods.			Coloured Piece-Goods.		Total.		Twist.	
	Pckgs.	Yards.	lbs.	Pckgs.	Yards.	Pckgs.	Yards.	Bales.	Lbs.
CALCUTTA	15,984	2,18,47,563	64,91,864	2,784	36,62,805	18,768	2,55,10,368	33,475	1,33,26,195
MADRAS	.....	... ..	.....	...	...	...	.....	1	400
MALABAR AND COROMANDEL COASTS (Calicut, Cochin, Tellicherry, Cannanore, Mangalore, Tuticorin, Beypore, Cocanada, Vizagapatam, &c.)	587	9,97,058	2,86,153	496	11,09,545	1,083	21,06,603	19,226	70,06,577
SCIND (Kurrachee)	39,025	7,39,53,614	1,66,32,175	4,460	75,79,114	43,485	8,15,32,728	13,193	49,69,938
KUTCH AND KATTYAWAR	626	12,38,668	3,13,777	60	92,767	686	13,26,435	4,401	16,89,249
BRITISH CONCAN & GUZERAT (Rutnagherry, Carwar, Vingorla, (Compta, Hurnee, Caranja, Panwell ; Malwan, Surat, Broach, &c.)	1,023	17,23,287	3,94,328	1,090	14,77,911	2,113	32,01,198	665	2,25,327
FOREIGN CONCAN (Jafferabad, Shreevurdhan, Rajpoori, Jambli, Coombharoo, &c.)	36	68,389	16,364	58	96,629	94	1,65,018	33	5,215
MARMAGOA, GOA, DAMAUN AND DIU	93	1,32,911	35,349	200	2,97,003	293	4,29,914	2,243	7,69,785
BRITISH BURMAH (Rangoon and Moulmein.)	3,300	46,78,702	14,77,948	2,496	34,18,704	5,796	80,97,406	14,378	50,66,676
CEYLON (Colombo and Galle)	69	1,38,666	52,133	183	4,67,591	252	6,06,257	74	24,500
CHINA (Hongkong)	.....	.....	.....	25	30,438	25	30,438	2,42,722	9,70,89,900
CHINA (Shanghai)	463	5,18,425	1,37,260	...	...	463	5,18 425	3,12,761	12,51,01,300
CHINA (Hanoi, Tientsin, &c.)	12	20,450	5,400	1	5,445	13	25,895	4	1,600
JAPAN (Yokohama and Kobe)	.....	.....	.....	...	...	...	.....	.....	.....
STRAITS SETTLEMENTS (Penang and Singapore.)	858	14,56,681	3,80,696	754	12,18,278	1,612	26,74,959	11,877	41,38,497
PERSIA (Bushire, Abbas, Mahmorah, &c.)	385	6,06,704	1,68,843	111	1,43,069	496	7,49,773	3,799	14,58,670
ARABIA (Muscat, Hoodeida, Jeddah, &c.)	712	10,32,921	2,45,285	563	10,17,003	1,275	20,49,924	1,874	6,63,200
TURKEY IN ASIA (Smyrna, Beyrout, Bagdad, (Bussorah, &c.)	939	16,21,202	4,37,599	166	1,78,292	1,105	17,99,494	4,476	17,81,116
MEKRAN AND SONMIANI (Vermulla, Gwadhur, &c.)	93	1,24,027	34,435	3	1,350	96	1,25,377	1	140
ADEN	5,766	81,77,591	23,70,645	1,482	23,51,710	7,248	1,05,29,301	5,541	20,42,100
AFRICA (Mauritius and Sychelles)	64	86,975	34,061	117	1,82,033	181	2,69,008	.....	.....
AFRICA (Zanzibar)	8,669	94,03,450	24,84,878	238	2,71,572	8,907	96,75,022	166	58,850
AFRICA (Mozambique)	5,013	60,35,074	12,90,848	104	1,33,762	5,117	61,68,836	32	11,400
ABYSSINIA (Massowa)	1,978	30,58,520	6,43,849	52	1,14,482	2,025	31 73,002	279	1,00,400
AFRICA (Suakim)	634	10,42,698	2,72,561	110	2,56,142	744	12,98,840	2	630
AFRICA (Egypt)	5	8,020	2,028	1	1,500	6	9,520	585	2,32,960
AFRICA (Natal)	2,510	26,71,128	5,36,370	30	40,595	2,540	27,11,723	...	.....
AFRICA (Hullulla, Beira, &c.)	32	36,845	12,320	2	935	34	37,780	13	5,200
AFRICA (Madagascar)	27	28,705	11,938	23	23,985	50	52,690	8	2,600
SUMATRA (Padang)	.....	.....	.....	...	...	...	.....	...	.....
JAVA (Batavia, Cheribon, &c.)	.....	... ..	.....	...	...	...	.....	399	84,875
SIAM (Bangkok)	288	5,14,686	1,26,870	...	...	288	5,14,686	47	18,800
LACADIVES AND MALDIVES	.....	.....	.....	...	...	...	.....	...	.....
EAST INDIAN & PHILIPPINE ISLAND. (Manila, Maccasar, &c.)	10	13,200	3,550	317	4,19,504	327	4,32,704	259	54,600
EUROPE	20	26,009	8,221	18	14,220	38	40,229	1,916	7,65,260
NEW ZEALAND (Batoum)	.....	.....	.....	...	...	...	.....	...	.....
AUSTRALIA	.....	.....	.....	...	...	...	.....	...	.....
AMERICA	.....	.....	.....	...	...	...	... ..	...	.....
Total Exports from 1st January to 31st December 1902	89,216	14,12,52,169	3,49,07,243	15,944	2,46,06,884	1,05,160	16,58,58,553	6,74,450	26,66,98,930
Exported same time 1901	84,525	13,63,00,064	3,35,85,159	12,623	1,99,63,669	97,148	15,62,63,733	6,42,032	25,43,17,562
Do. do. 1900	74,415	11,69,55,481	2,81,68,912	9,616	1,56,02,287	83,981	13,25,57,718	8,46,503	13,65,71,588
Do. do. 1899	84,238	12,28,07,108	2,98,19,677	8,513	1,28,42,538	92,751	13,56,49,646	6,81,039	26,95,59,281
Do. do. 1898	69,026	9,92,68,706	2,47,68,678	6,177	90,72,326	75,203	10,83,41,032	5,53,681	21,87,24,607
Do do. 1897	69,718	10,11,26,083	2,51,62,666	5,619	84,22,451	75,337	10,95,48,534	4,61,260	18,11,84,351
Do. do. 1896	87,364	12,29,74,182	3,15,20,976	6,411	98,54,183	93,775	13,28,28,315	5,84,599	22,93,46,959
Do. do. 1895	92,553	12,84,63,625	3,17,23,691	5,726	88,09,449	98,079	13,72,73,074	4,96,421	19,26,02,163
Do. do. 1894	82,151	11,89,60,215	2,91,05,588	4,057	63,60,875	86,208	12,53,21,090	4,68,995	18,21,23,551
Do. do. 1893	66,989	9,78,66,292	2,31,69,762	3,661	65,61,214	70,650	10,39,27,506	4,12,584	15,99,60,286

EXPORTS OF EUROPE MANUFACTURED PIECE-GOODS AND YARNS, BY STEAMERS, SHIPS, AND NATIVE CRAFT.

From 1st January to 31st December 1902.

As per Export General Manifests.

TO	PIECE-GOODS.								TOTAL.		TWIST.	
	Grey.		White.		Colored and Printed.		Country Dyed.					
	Pckgs.	Yards.	Pckgs.	Yards.	Pckgs.	Yards.	Pckgs.	Yards.	Pckgs.	Yards.	Pckgs.	Lbs.
CALCUTTA	371	10,84,027	201	5,11,014	153	3,90,121	...	.....	725	19,85,162	44	16,400
MADRAS	10	6,000	3	5,980	4	12,268	...	.....	17	24,248	...	.....
MALABAR AND COROMANDEL COASTS (Calicut, Cochin, Tellicherry, Cannanore, Mangalore, Tuticorin, Beypore, Cocanada, Vizagapatam, &c.)	8,032	1,74,32,414	2,314	59,90,050	741	18,35,713	10	19,734	11,097	2,52,77,911	396	1,21,370
SCIND (Kurrachee)	7,781	1,62,57,269	12,317	3,27,82,569	4,819	1,22,93,103	...	.....	24,917	6,13,32,941	751	2,35,045
KUTCH and KATTYAWAR	3,541	84,79,687	686	19,96,102	1,431	37,61,537	15	23,045	5,673	1,42,60,371	81	28,910
BRITISH CONCAN & GUZERAT (Rutnagherry, Carwar, Vingorla, Compta, Hurnee, Caranja, Panwell, Malwan, Surat, Broach, &c.)	1 206	24,59,243	225	5,05,307	362	8,00,061	...	.....	1,793	37,64,611	235	63,936
FOREIGN CONCAN (Jafferabad, Shreevurdhan, Rajpoori, Jambli, Coombharoo, &c.)	39	1,02,765	12	19,179	26	51,678	...	.....	77	1,73,622	11	1,420
MARMAGOA, GOA, DAMAUN, and DIU	372	7,41,502	138	2,56,837	258	4,89,185	56	21,995	824	15,09,519	1,791	5,06,840
BRITISH BURMAH (Rangoon and Moulmein.)	1,341	17,49,905	270	5,85,381	354	8,65,035	79	1,22,815	2,044	33,23,186	...	.....
CEYLON (Colombo and Galle.)	313	3,97,382	256	7,14,525	363	7,65,896	34	39,150	972	19,16,953	32	10,000
CHINA (Hongkong)	3	1,874	10	8,990	14	9,243	...	.....	27	20,107	...	.....
CHINA (Shanghai)	...	.....	...	.....	12	10,936	5	10,500	17	21,436	..	.....
CHINA (Hanoi, Amoy, Tientsin, &c.)	5	9,450	...	.....	6	8,905	26	54,600	37	72,955	...	.....
JAPAN (Yokohama and Kobe.)	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....
STRAITS SETTLEMENTS (Penang and Singapore.)	34	32,777	582	16,32,648	536	13,05,527	1,783	35,17,810	2,935	64,88,762	...	.....
PERSIA (Bushire, Abbas, Mahmorah, &c.)	1,575	33,27,543	483	11,59,993	981	18,16,770	4,354	65,71,297	7,391	1,28,75,603	4,094	11,85,320
ARABIA (Muscat, Hoodeida, Jeddah, &c.)	496	9,91,380	867	23,00,261	833	19,22,151	2,211	61,28,953	4,407	1,13,42,745	263	80,910
TURKEY IN ASIA (Smyrna, Beyrout, Bagdad, Bussorah, &c.)	37	71,261	17	33,291	192	1,71,739	1,968	20,29,017	2,214	23,05,308	126	38,600
MEKRAN AND SONMIANI (Vermalla, Gwadhur, &c.)	1	690	5	4,170	3	3,650	3	3,800	12	12,310	12	4,115
ADEN	220	4,23,494	528	14,13,502	584	13,46 779	733	20,08,732	2,065	51,92,507	257	78,300
AFRICA (Mauritius, &c.)	274	5,20,078	138	3,15,644	365	9,41,690	29	51,435	806	18,28,847	1	300
AFRICA (Madagascar)	5	7,955	14	25,872	24	60,195	23	32,037	66	1,26,059	7	2,000
AFRICA (Zanzibar)	368	5,10,194	410	8,85,992	516	9,76,257	2,567	33,74,740	3,861	57,47,183	46	15,380
AFRICA (Mozambique)	166	2,79,308	133	2,04,107	275	3,22,434	1,355	16,45,642	1,929	29,51,491	3	900
ABYSSINIA (Massawa)	23	46,045	10	27,756	37	65,153	18	58,440	88	1,97,394	29	9,100
ARRICA (Suakim)	12	42,121	9	23,085	3	7,810	4	3,600	28	76,619	...	.....
AFRICA (Egypt)	5	12,072	...	.....	3	6,450	1	1,500	9	20,022	...	.....
AFRICA (Natal)	79	1,44,042	44	91,401	123	3,19,700	100	1,15,513	346	6,70,656	...	.....
AFRICA (Hullulla, Beira, &c.)	3	2,743	33	89,067	31	54,390	43	46,706	110	1,42,906	...	.....
SIAM (Bangkok)	...	.....	24	64,291	20	66,729	189	4,38,080	238	5,69,100	...	.....
EAST INDIAN AND PHILIPPINE ISLANDS (Manila, Maccasar, &c.)	...	.....	...	.....	...	.....	13	27,300	13	27,300	...	.....
SUMATRA (Padang)	...	.....	3	5,056	...	.....	...	.....	3	5,056	...	.....
JAVA (Batavia, Cheribon, &c.)	...	.....	...	.....	6	9,923	...	.....	6	9,923	...	.....
AUSTRALIA (Melbourne, Sydney, &c.)	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....
EUROPE	4	5,370	7	12,698	7	9,102	..	.....	18	27,170	3	570
BATOUM	...	.....	18	49,305	...	.....	...	.....	18	49,305	...	.....
BORNEO	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....
AMERICA	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....
Total Exports from 1st January to 31st December 1902	26,314	5,51 38,594	19,757	5,16,64,073	13,088	3,12,00,130	15,619	2,63,46,441	74,778	16,43,49,238	8,182	23,94,416
Exported same time 1901	28,462	5,85,51,551	22,230	5,93,59,915	13,410	3,29,84,643	21,146	3,22,90,294	85,248	18,31,86,393	8,064	26,73,641
Do. do. 1900	27,633	5,53,43,428	19,586	5,13,63 885	13,872	3,31 91,103	17,215	2,74,64,423	78,100	16,73,65,839	9,757	28,84,984
Do. do. 1899	34,887	7,05.60,675	22,610	5,98,08,127	15,127	3,44,12,885	21,10-	3,37,70,400	94 026	19.85.82,091	13,161	40,20,855
Do. do. 1898	31,802	6,55,18,568	21,705	5,67,77,832	12 197	2,96,36,158	2 ,081	3,23,21,190	85 785	18,42,53,728	6,923	21,22,131
Do. do. 1897	30,473	6,50,44,122	18,695	5 09,92.275	11,663	2,89,44,776	20,511	3,31,92,258	81.342	17,80,90,431	7,549	23,09,651
Do. do. 1896	31.144	6,86,89,759	20,842	5,68,82,731	16.263	4,21,98,286	19,888	3,42,28,289	88,137	20,19,94,015	8,991	27,64,648
Do. do. 1895	35,793	7,91,77,054	19,170	5,36,58,345	19,762	5,10,95,577	28,544	4,33,16,546	1,03,269	22,72,47,522	11,074	33,82,649
Do. do. 1894	38,539	8,65,64.438	20,324	5,50,32,788	19,026	4,84,36,921	22,961	3,65,18,248	1,00,850	22,65,52,395	12,903	38,94,337
Do. do. 1893	35,480	8,44,07,948	18,185	4,93,91,032	17,946	4,79,15,622	18,664	3,22,68,665	90,275	21,39,83,267	10,065	31,34,196

EXPORTS OF INDIAN MANUFACTURED PIECE-GOODS AND YARNS BY RAILWAYS.

From 1st January to 31st December 1902.

G. I. P. RAILWAY, NORTH-EAST LINE.

STATIONS TO	Country Piece-Goods.		Country Twist.		Remarks.
	Packages.	Indian Maunds.	Packages.	Indian Maunds.	
TITWALA TO KASARA ...	2	4	...	...	
IGATPURI	1	3	...	...	
DEOLALI	1	3	2	1	
GHOTI	...	...	...	...	
NASIK ROAD	1	4	7	26	
KHERWARI	12	58	...	...	
NIPHAD	...	...	...	...	
LASALGAON	...	...	3	3	
MUNMAR	5	27	38	180	
NANDGAON	...	...	...	...	
CHALISGAON	7	24	...	...	
KAJGAON	...	...	...	...	
PACHORA	...	...	...	...	
MAHEJI	...	...	...	...	
MHASAWAD	1	2	...	...	
JALGAON	8	55	8	29	
BHADLI	...	...	...	...	
BHUSAWAL	6	26	...	...	
NADGAON	1	3	...	...	
MALKAPUR	8	37	...	...	
NANDURA	...	...	...	...	
SHEGAON	9	57	...	...	
KHAMGAON	2	16	...	...	
PARAS	1	3	...	...	
AKOLA	5	23	2	12	
MURTIZAPUR	14	90	...	...	
AMRAOTI	140	661	11	42	
CHANDUR	8	36	...	...	
DHAMANGAON	...	...	5	5	
PULGAON	...	...	...	...	
WARDHA	...	...	...	...	
SONEGAON *	...	...	...	...	
HINGANGHAT *	2	11	...	...	
WARORA *	15	88	5	22	
SINDI	...	...	...	...	
NAGPUR	49	151	24	95	
OTHER STATIONS BETWEEN TITWALA AND NAGPUR ...	6	24	16	48	
SAUDA	...	...	...	...	
RAWER	1	1	...	...	
BURHANPUR	1	6	4	13	
DONGARGAON	...	...	4	10	
KHANDWA	5	26	19	88	
KHIRKIAN	2	9	...	...	
HARDA	1	2	...	...	
TIMARNI	...	...	...	...	
SIONI	...	...	...	...	
ITARSI	1	2	...	...	
SOHAGPUR	...	...	...	...	
PIPARIA	1	4	...	...	
BANKHERI	1	2	...	...	
GADARWARA	...	...	...	...	
KARELI	1	9	...	...	
NURSINGHPUR	...	...	...	...	
CHINDWARA	...	...	...	...	
JABALPUR	9	34	91	324	
OTHER STATIONS BETWEEN SAUDA AND JABALPUR ...	...	...	...	...	
TOTAL EXPORTS, N.-E. LINE	327	1,501	239	898	

* Wardha Coal State Railway.

G. I. P. RAILWAY, SOUTH-EAST LINE.

STATIONS TO	Country Piece-Goods.		Country Twist.		Remarks.
	Pckgs.	Indian Maunds.	Pckgs.	Indian Maunds.	
THANA AND KALYAN	...	...	...	...	
NERAL	1	4	...	...	
LANAULI	2	8	...	...	
KARJAT	3	9	...	...	
TALEGAON	9	23	...	...	
CHINCHWAD	1	3	...	...	
KIRKEE	7	39	...	...	
POONA	80	422	45	178	
KHEDGAON	2	9	...	...	
DIKSAL	4	19	2	5	
JEUR	1	1	...	...	
KEM	...	...	1	7	
BARSI ROAD	5	13	1	5	
BARSI TOWN†	...	...	...	...	
SHOLAPUR	5	17	61	185	
GULBARGA	9	31	22	61	
YADAGIRI	...	...	...	...	
SAIDAPUR ROAD	...	...	...	...	
RAICHUR	...	...	...	...	
OTHER STATIONS BETWEEN THANA AND RAICHUR ...	3	12	8	16	
TOTAL EXPORTS, S.-E. LINE.	132	610	140	457	
GRAND TOTAL...	459	2,111	379	1,355	
TOTAL EXPORTS FOR 1902...	459	2,111	379	1,355	
Do. do. 1901...	331	1,569	374	1,246	
Do. do. 1900...	330	1,429	457	1,154	
Do. do. 1899...	692	2,912	1,828	5,108	
Do. do. 1898...	1,057	4,242	5,165	8,185	
Do. do. 1897...	670	2,998	4,807	7,836	
Do. do. 1896...	778	3,704	2,428	5,952	
Do. do. 1895...	1,163	5,257	5,212	7,090	
Do. do. 1894...	3,979	20,997	6,990	13,441	
Do. do. 1893...	1,522	7,451	6,914	10,521	

TO STATIONS ON THE BENGAL-NAGPUR RAILWAY AND ITS CONNECTIONS.

TAMSAR ROAD	...	...	...	...
KAMPTEE	2	4	16	124
BELASPUR	...	...	6	39
GONDIA	...	...	...	...
DONGARGARH	...	...	2	10
RAJ-NANDGAON	...	...	...	...
DRUG	...	...	5	24
RAIPUR	1	5	31	147
BHATAPARA	...	...	...	...
RAIGARH	...	...	...	...
CHAMPA	...	...	2	10
AKALTARA	...	...	...	...
JHARSUGUDA	...	...	...	...
CALCUTTA	3	29	...	...
AGRA	...	...	...	...
CAWNPORE	...	...	...	...
OTHER STATIONS	596	2,251	424	2,149
TOTAL EXPORTS FOR 1902...	602	2,289	486	2,503
Do. do. 1901...	157	687	44	114
Do. do. 1900...	45	173	30	110
Do. do. 1899...	111	489	207	798
Do. do. 1898...	161	633	1,076	4,434
Do. do. 1897...	31	110	86	245
Do. do. 1896...	69	262	79	264
Do. do. 1895...	174	631	109	475
Do. do. 1894...	525	1,850	182	787
Do. do. 1893...	46	170	26	117

† Barsi Light Railway.

TO STATIONS ON THE INDIAN MIDLAND RAILWAY AND ITS CONNECTIONS.

STATIONS.	Country Piece-Goods.		Country Twist.		Remarks.
	Pckgs.	Indian Maunds.	Pckgs.	Indian Maunds.	
HOSHANGABAD	...	...	...	...	
BHOPAL	...	...	2	5	
BHILSA	...	...	...	...	
BASODA	1	6	...	...	
BAMORA	...	...	2	10	
BINA	5	26	7	35	
LALITPUR	1	5	...	...	
TALBAHAT	...	...	...	...	
JHANSI	1	3	2	2	
AGRA FORT	1	5	...	...	
GWALIOR	1	1	...	...	
KHORAI	...	...	...	...	
SAUGOR	...	...	2	8	
LUCKNOW	20	71	...	...	
NANPARA	...	...	...	...	
BAHRAICH	...	...	...	...	
CALCUTTA	...	...	...	...	
CAWNPORE (VIA ITARSI) ...	744	3,633	44	218	
BARABANKI	...	...	4	21	
MORAR ROAD	...	...	...	...	
MAURANIPUR	...	...	...	...	
SUMER	...	...	...	...	
SEOHARA	...	...	...	...	
LAKHIMPUR	...	...	...	...	
MANIKPUR	...	...	...	...	
TICOMGARH	...	...	...	...	
NOWGONG	...	...	...	...	
DAMOH	2	8	2	9	
SEHORE	...	...	...	...	
GARAKOTA	...	...	...	...	
SERONJ	...	...	...	...	
GUNA	...	...	...	...	
OTHER STATIONS	28	129	24	95	
TOTAL EXPORTS FOR 1902...	804	3,887	89	403	
Do. do. 1901...	1,183	6,561	445	1,870	
Do. do. 1900...	1,842	9,755	441	1,211	
Do. do. 1899...	4,016	20,580	288	733	
Do. do. 1898...	6,016	30,092	774	2,376	
Do. do. 1897...	4,072	19,868	466	1,050	
Do. do. 1896...	3,167	16,382	177	501	
Do. do. 1895...	3,780	19,292	159	627	
Do. do. 1894...	5,365	26,664	1,583	7,463	
Do. do. 1893...	7,089	36,798	1,576	7,814	

TO STATIONS ON THE MADRAS RAILWAY AND ITS CONNECTIONS.

ADONI	2	11	22	86
CUDDAPAH	...	...	...	...
MADRAS	1,111	5,889	2,331	9,442
METTUPALAIYAM	...	...	...	...
TADPATRI	...	...	12	59
BANGALORE	334	1,806	56	264
OTHER STATIONS	14	73	15	60
TOTAL EXPORTS FOR 1902...	1,461	7,779	2,436	9,911
Do. do. 1901...	1,822	9,249	2,198	9,635
Do. do. 1900...	790	4,186	153	851
Do. do. 1899...	318	1,674	151	842
Do. do. 1898...	91	442	81	814
Do. do. 1897...	180	775	48	211
Do. do. 1896...	248	1,220	47	231
Do. do. 1895...	46	204	43	185
Do. do. 1894...	43	205	42	120
Do. do. 1893...	84	431	9	29

TO STATIONS ON THE DHOND AND MUNMAD STATE RAILWAY.

STATIONS.	Country Piece-Goods.		Country Twist.		Remarks.
	Packages.	Indian Maunds.	Packages.	Indian Maunds.	
PIMPRI	...	...	...	...	
AHMEDNAGAR	9	31	29	109	
VAMBORI	...	...	4	4	
RAHURI	...	...	...	...	
BELAPUR	1	4	...	...	
CHITALI	...	...	...	...	
PUNTAMBA	...	...	...	...	
YEOLA	4	27	...	...	
OTHER STATIONS	...	...	...	...	
TOTAL EXPORTS FOR 1902 ...	14	62	33	113	
Do. do. 1901 ...	7	23	24	90	
Do. do. 1900 ...	30	141	16	61	
Do. do. 1899 ...	31	100	23	43	
Do. do. 1898 ...	32	154	45	77	
Do. do. 1897 ...	57	188	36	99	
Do. do. 1896 ...	53	286	25	95	
Do. do. 1895 ...	84	365	42	99	
Do. do. 1894 ...	453	2,450	36	131	
Do. do. 1893 ...	66	357	60	261	

TO STATIONS ON THE EAST INDIAN AND CONNECTED RAILWAYS *vid* G. I. P.

SEHORE ROAD	.....	.....	.....	.....
KUTNI	.....	.....	.....	.....
MAIHAR	1	5	.....	.....
MEJA ROAD	.....	.....	.....	.....
SUTNA	.....	.....	.....	.....
MIRZAPUR	.....	.....	.....	.....
AHRAURA ROAD	.....	.....	.....	.....
MOGUL SERAI	.....	.....	.....	.....
GHAZIPUR	.....	.....	.....	.....
PATNA CITY	.....	.....	.....	.....
CALCUTTA	.....	.....	.....	.....
ALLAHABAD	15	79	1	3
CAWNPORE (VIA JABALPUR) ...	115	530	15	60
BENARES	.....	.....	1	3
JAUNPUR CITY	.....	.....	.....	.....
AKBARPUR	.....	.....	.....	.....
BHATAPARA	.....	.....	.....	.....
CHAMPA	.....	.....	.....	.....
RAIPUR	.....	.....	.....	.....
MALLIPUR	.....	.....	.....	.....
OTHER STATIONS	7	15	.....	.....
TOTAL EXPORTS FOR 1902 ...	138	629	17	66
Do. do. 1901 ...	49	198	11	47
Do. do. 1900 ...	105	484	27	104
Do. do. 1899 ...	111	413	2	4
Do. do. 1898 ...	172	585	44	197
Do. do. 1897 ...	137	451	142	415
Do. do. 1896 ...	74	307	375	1,043
Do. do. 1895 ...	20	78	305	1,103
Do. do. 1894 ...	311	1,126	685	2,656
Do. do. 1893 ...	272	1,095	696	2,683

TO STATIONS ON THE SOUTHERN MAHRATTA RAILWAY.

INDI ROAD	.....	.....	.....	.....
BIJAPUR	.....	.....	4	7
TELGI	.....	.....	5	23
ALIMATI	.....	.....	.....	.....
BAGALKOT	1	2	.....	.....
KATGERI	.....	.....	.....	.....
ALUR	.....	.....	.....	.....
GADAG	.....	.....	8	31
VITTA	.....	.....	.....	.....
KURNOOL ROAD	1	4	28	155
KOPBAL	.....	.....	5	14
HOSPET	1	13	.....	.....
BELLARY	11	57	108	379
HUBLI	4	31	.....	.....
DHARWAR	16	119	.....	.....
YALVIGI	.....	.....	.....	.....
Carried forward ...	34	226	156	609

TO STATIONS ON THE SOUTHERN MAHRATTA RAILWAY—*continued.*

STATIONS.	Country Piece-Goods.		Country Twist.		Remarks.
	Pckgs.	Indian Maunds.	Pckgs.	Indian Maunds.	
Brought forward...	34	226	156	609	
BYADGI ...	6	48	.....	.....	
RANIBENNUR	.....	.....	.....	.....	
HARIHAR ...	.....	.....	.....	.....	
DAVANGERE	.....	.....	.....	.....	
HOLALKHERI	.....	.....	.....	.....	
LONAND ...	.....	.....	.....	.....	
WATHAR ...	3	14	.....	.....	
SATARA ROAD	.....	.....	.....	.....	
KOREGAON	8	18	.....	.....	
RAHIMATPUR	.....	.....	.....	.....	
TASGAON ...	.....	.....	.....	.....	
MASUR ...	.....	.....	.....	.....	
KARAD	1	4	6	27	
KUNDAL ROAD	.....	.....	.....	.....	
ASHTA ROAD	.....	.....	.....	.....	
SANGLI ROAD	1	1	.....	.....	
MIRAJ ...	6	41	2	5	
SHEDBAL ...	2	10	.....	.....	
CHIKODI ROAD	2	12	.....	.....	
GOKAK ROAD	1	10	5	24	
KUDCHI ...	5	33	4	16	
JAMKHAND	.....	.....	.....	.....	
BELGAUM ...	13	31	3	5	
TADVAL ...	.....	.....	3	11	
KADUR ...	5	28	.....	.....	
KARAJGI ...	.....	.....	.....	.....	
ARSIKERE ...	9	47	.....	.....	
BANGALORE ...	388	1,831	6	25	
MYSORE ...	67	338	1	4	
BIRUR ...	5	40	.....	.....	
ISLAMPUR ...	.....	.....	.....	.....	
KALLURU ...	.....	.....	.....	.....	
GUNTUR ...	1	1	.....	.....	
KOLHAPUR ...	13	62	.....	.....	
SHIROL ROAD ...	.....	.....	.....	.....	
RABKAVI	.....	.....	.....	.....	
HATKANGALE	4	34	.....	.....	
SASVAD	.....	.....	.....	.....	
BEZVADA	.....	.....	1	2	
TAMKAR	.....	.....	.....	.....	
CHIKMAGALUR ...	9	53	.....	.....	
OTHER STATIONS... ...	169	863	.....	.....	
TOTAL EXPORTS FOR 1902...	747	3,745	187	728	
Do. do. 1901...	56	266	25	103	
Do. do. 1900...	89	418	125	310	
Do. do. 1899...	113	494	149	464	
Do. do. 1898...	994	4,784	966	3,591	
Do. do. 1897...	2,120	9,934	787	3,085	
Do. do. 1896...	1,986	9,786	407	1,445	
Do. do. 1895...	1,054	5,170	250	971	
Do. do. 1894...	1,450	6,860	597	2,599	
Do. do. 1893...	1,083	4,662	307	1,334	

TO STATIONS ON THE RAJPUTANA-MALWA RAILWAY *viâ* G. I. P. AND ITS CONNECTIONS.

SANAWAD	...	...	3	7
MORTAKKA	...	...	4	13
BARWAHA	...	...	25	61
MHOW	4	6	38	63
INDORE	2	5	47	91
UJJAIN	...	...	1	1
CHAMBAL	...	...	...	...
BARNAGAR	...	...	...	...
RUNIJA	...	...	...	...
RUTLAM	...	...	...	...
NAMLI	...	...	...	...
JAVRA	...	...	...	...
MANDSAUR	...	...	...	...
NEEMUCH	...	...	...	...
OTHER STATIONS	...	...	...	...
TOTAL EXPORTS FOR 1902 ...	6	11	118	236
Do. do. 1901 ...	7	20	278	535
Do. do. 1900 ...	20	62	218	370
Do. do. 1899 ...	16	44	194	380
Do. do. 1898 ...	202	577	145	390
Do. do. 1897 ...	32	158	142	231
Do. do. 1896 ...	21	84	59	147
Do. do. 1895 ...	57	226	149	329
Do. do. 1894 ...	954	4,377	316	1,473
Do. do. 1893 ...	826	3,563	330	1,379

TO STATIONS ON THE NIZAM'S STATE RAILWAY.

STATIONS.	Country Piece-Goods.		Country Twist.		Remarks.
	Pckgs.	Indian Maunds.	Pckgs.	Indian Maunds.	
SERAM	...	...	...	...	
TANDUR	...	...	...	...	
LINGAMPALLI	...	...	...	...	
HYDERABAD	...	...	...	...	
SECUNDERABAD	...	...	...	...	
ALER	...	...	...	...	
WARANGAL	...	...	...	...	
COCONADA	...	...	...	...	
BEZVADA	2	6	...	...	
ELLORE	...	...	...	...	
CHITTAPUR	...	...	...	...	
VIKARABAD	...	...	...	...	
OTHER STATIONS ...	...	...	9	39	
TOTAL EXPORTS FOR 1902 ...	2	6	9	39	
Do. do. 1901 ...	6	25	80	333	
Do. do. 1900 ...	16	85	2,482	11,607	
Do. do. 1899 ...	33	125	675	2,890	
Do. do. 1898 ...	16	61	154	424	
Do. do. 1897 ...	37	153	21	57	
Do. do. 1896 ...	62	230	49	153	
Do. do. 1895 ...	10	46	25	90	
Do. do. 1894 ...	18	76	22	89	
Do. do. 1893 ...	17	54	5	19	

TO STATIONS ON THE HYDERABAD-GODAVERY VALLEY RAILWAY.

STATIONS.	Country Piece-Goods.		Country Twist.		Remarks.
	Pckgs.	Indian Maunds.	Pckgs.	Indian Maunds.	
AURANGABAD	17	75	4	23	
JALNA	...	...	...	...	
SAILU	...	...	...	...	
OTHER STATIONS	...	...	8	30	
TOTAL EXPORTS FOR 1902 ...	17	75	12	53	
Do. do. 1901 ...	6	20	...	...	
Do. do. 1900 ...	3	8	9	16	

BOMBAY, BARODA AND CENTRAL INDIA RAILWAY.

(Including Rajputana-Malwa Railway.)

	TO	Country Piece-Goods.		Country Twist.		Remarks.
		Pckgs.	Indian Maunds.	Pckgs.	Indian Maunds.	
B. B. & C. I. Railway.	STATIONS between ANDHERI and SURAT (excluding Surat)..	1,545	6,918	686	2,850	
	SURAT	1,823	12,092	988	3,695	
	STATIONS between SURAT and BROACH (excluding Broach)	319	1,669	40	192	
	BROACH	529	3,492	158	697	
	STATIONS between BROACH and BARODA(excluding Baroda)	303	1,864	7	29	
	BARODA	739	4,133	96	395	
	STATIONS between BARODA and ANAND (excluding Anand)..	85	486	8	18	
	ANAND	69	438	1	9	
	STATIONS on the ANAND-GODHRA BRANCH (excluding Godhra)...	362	2,041	2	6	
	GODHRA	327	1,495	4	4	
	STATIONS between ANAND and AHMEDABAD (excluding Nadiad and Ahmedabad)...	144	889	3	15	
	NADIAD	211	1,213	21	82	
	AHMEDABAD	4,705	28,014	731	2,552	
	STATIONS between AHMEDABAD and VIRAMGAM (excluding Viramgam)	61	325	.....	.....	
	VIRAMGAM	42	190	5	27	
	STATIONS on the PATRI BRANCH	15	89	.....	.....	
	STATIONS between VIRAMGAM and WADHWAN (excluding Wadhwan)	12	69	.....	.....	
	WADHWAN	34	214	5	20	
	TOTAL ...	11,325	65,631	2,755	10,591	

BOMBAY, BARODA AND CENTRAL INDIA RAILWAY—*continued.*

	STATIONS.	Country Piece-Goods. Pckgs.	Country Piece-Goods. Indian Maunds.	Country Twist. Pckgs.	Country Twist. Indian Maunds.	Remarks.
B.-G.-J.-P.Ry. *Via* Wadhwan.	LIMBDI ...	20	89	...	...	
	BHAVNAGAR ...	41	225	4	14	
	JETPUR ...	7	33	1	1	
	DHORAJEE ...	55	209	1	2	
	OTHER STATIONS ON THE BHAVNAGAR-GONDAL-JUNAGADH-PORBANDER RAILWAY ...	407	2,217	10	23	
	MORVI RAILWAY ...	276	1,461	7	22	
	VIA MIYAGAM ...	282	1,546	80	380	
	„ ANAND ...	352	1,931	186	625	
	„ VISHVAMITRI ...	114	583	136	682	
	„ AHMEDABAD (Ahmedabad-Prantij Ry.) ...	128	612	14	67	
	„ ANKLESHWAR ...	69	380	2	3	
	„ SURAT ...	932	5,795	385	1,833	
	TOTAL ...	2,683	15,071	826	3,652	
Foreign Railway *via* Sabarmati.	KHODIAR to PALANPUR (excluding Palanpur) ...	467	2,140	274	1,174	
	PALANPUR ...	67	320	1	1	
	VIA PALANPUR ...	238	1,181	31	138	
	MORI to CHITRASANI ...	209	801	65	298	
	MARWAR RAILWAY JUNCTION AND *via* MARWAR RAILWAY JUNCTION ...	1,321	6,639	43	117	
	SARDHANA to ERINPURA ROAD ...	254	1,341	41	175	
	BEAWAR ...	294	1,889	88	170	
	AJMER ...	819	4,077	10	25	
	NUSSEERABAD to BARL ...	269	1,736	9	28	
	LADPURA to AGRA (excluding Jeypore, Achnera and Agra) ...	251	1,262	5	34	
	JEYPORE ...	833	4,277	25	146	
	VIA KUCHAMAN ROAD ...	80	335	...	...	
	ACHNERA ...	...	...	...	...	
	STATIONS on the CAWNPORE-ACHNERA RAILWAY ...	5,359	26,909	315	1,524	
	VIA HATHRAS ...	4	8	...	...	
	CAWNPORE ...	116	630	...	...	
	VIA CAWNPORE ...	8	25	...	...	
	AGRA FORT ...	956	4,153	15	66	
	VIA AGRA ...	519	2,626	90	455	
	VIA AGRA CANTONMENT ...	1	3	...	...	
	STATIONS on the REWARI-BHATINDA-FAZILKA Section (excluding Bhiwani) ...	28	136	...	...	
	BHIWANI ...	1,693	6,902	3	10	
	VIA BHATINDA ...	249	940	5	21	
	VIA FEROZEPORE ...	...	...	...	...	
	STATIONS between BASWA and DELHI (excluding Delhi) ...	199	876	...	...	
	DELHI ...	37,357	1,72,705	290	1,470	
	VIA DELHI ...	530	2,455	2	6	
	VIA KOTKAPURA ...	2,890	9,291	18	63	
	TOTAL ...	55,011	2,53,657	1,330	5,921	
Foreign Railway *via* Godhra.	NUSSEERABAD to BARL ...	18	105	...	...	
	RUPAHELI to GANGRAR (excluding Bhilwara) ...	52	325	...	...	
	BHILWARA ...	382	2,542	5	25	
	CHANDERIA to KESARPURA (excluding Chitorgarh) ...	131	800	3	3	
	CHITORGARH ...	115	624	...	...	
	VIA CHITORGARH ...	575	3,560	1	5	
	NEEMUCH ...	416	2,689	5	13	
	HARKIAKHAL to DHODHAR (excluding Mandsaur) ...	90	570	...	...	
	MANDSAUR ...	464	3,049	21	25	
	JAORA to KHANDWA ...	1,860	11,011	47	180	
	VIA KHANDWA ...	...	...	...	...	
	VIA UJJAIN ...	158	948	3	6	
	STATIONS on the GODHRA-RUTLAM-NAGDA RAILWAY	738	4,455	36	97	
	STATIONS on the NAGDA-UJJAIN RAILWAY ...	656	3,879	52	176	
	TOTAL ...	5,655	34,557	173	530	
	GRAND TOTAL ...	74,674	3,68,916	5,084	20,694	
	TOTAL EXPORTS FOR 1902 ...	74,674	3,68,916	5,084	20,694	
	Do. do. 1901 ...	86,780	4,30,367	4,626	19,455	
	Do. do. 1900 ...	43,256	2,21,455	2,641	10,847	
	Do. do. 1899 ...	41,959	2,15,356	2,440	10,165	
	Do. do. 1898 ...	38,015	1,93,760	3,345	14,649	
	Do. do. 1897 ...	36,229	1,93,265	3,704	15,086	
	Do. do. 1896 ...	32,450	1,71,417	5,106	20,673	
	Do. do. 1895 ...	44,177	2,42,705	6,127	25,214	
	Do. do. 1894 ...	40,050	2,13,058	5,313	21,743	
	Do. do. 1893 ...	30,461	1,59,620	4,802	20,275	

SUMMARY OF EXPORTS BY ALL RAILWAYS.

RAILWAYS.		Country Piece-Goods.		Country Twist.	
		Pckgs.	Indian Maunds.	Pckgs.	Indian Maunds.
G.I. P. RAILWAY (North-East Line)		327	1,501	239	898
Do. (South-East Line)		132	610	140	457
To Stations on the	BENGAL-NAGPUR RAILWAY	602	2,289	486	2,503
	INDIAN MIDLAND RAILWAY	804	3,887	89	403
	MADRAS RAILWAY	1,461	7,779	2,436	9,911
	DHOND & MUNMAD STATE RAILWAY	14	62	33	113
	EAST INDIAN RAILWAY	138	629	17	66
	SOUTHERN MAHRATTA RAILWAY	747	3,745	167	728
	RAJPUTANA-MALWA RAILWAY VIA G. I. P. ...	6	11	118	236
	NIZAM'S STATE RAILWAY	2	6	9	39
H. Godavery Valley Railway		17	75	12	53
B. B. & C. I. RAILWAY (including Rajputana-Malwa Railway)		74,674	3,68,916	5,084	20,694
TOTAL EXPORTS IN 1902		78,924	3,89,510	8,850	36,101
Do. do. 1901		90,404	4,48,995	8,105	33,428
Do. do. 1900		46,526	2,38,196	6,599	26,641
Do. do. 1899		47,402	2,42,198	5,959	21,433
Do. do. 1898		46,756	2,35,280	11,795	34,637
Do. do. 1897		43,565	2,27,900	10,239	28,305
Do. do. 1896		38,908	2,03,678	8,752	30,504
Do. do. 1895		50,565	2,73,974	12,421	36,183
Do. do. 1894		53,148	2,77,663	15,716	50,502
Do. do. 1893		41,466	2,14,201	14,725	44,430

ANNUAL PROGRESS OF RAILWAYS IN INDIA SINCE THEIR COMMENCEMENT.

Year.	Total Miles.	Year.	Total Miles.	Year.	Total Miles.	Year.	Total Miles.
1853	20	1865	3,363	1877	7,322	1890	16,407
1854	71	1866	3,563	1878	8,223	1891	17,314
1855	169	1867	3,929	1879	8,498	1892	17,894
1856	272	1868	4,008	1880	9,166	1893	18,510
1857	287	1869	4,255	1881	9,894	1894	18,908
1858	427	1870	4,771	1882	10,153	1895	19,555
1859	625	1871	5,074	1883	10,462	1896	20,262
1860	838	1872	5,369	1884	11,635	1897	21,123
1861	1,587	1873	5,697	1885	12,287	1898	22,048
1862	2,333	1874	6,226	1886	12,896	1899	23,528
1863	2,507	1875	6,543	1887	14,109	1900	24,760
1864	2,958	1876	6,862	1888	14,582	1901	25,373
				1889	15,893	1902	* .....

* Figures not received up to time of publication.

Statement showing the Exports of Indian Manufactured Piece-Goods and Yarns by Sea and Rail during the years 1893 *to* 1902.

Year.	Piece-Goods		Total.	Yarns				Total.		Remarks.
	By Sea.	By Rail.		By Sea.		By Rail.				
	Packages.	Packages.	Packages.	Packages.	lbs.	Packages.	lbs.	Packages.	lbs.	
1893	70,650	41,466	1,11,516	4,12,584	15,99,60,236	14,725	36,55,568	4,27,309	16,36,15,854	
1894	86,208	53,148	1,39,356	4,68,995	18,21,23,551	15,716	41,55,312	4,84,711	18,62,78,863	
1895	98,079	50,565	1,48,644	4,96,421	19,26,02,163	12,421	29,77,128	5,08,842	19,55,79,291	
1896	93,775	38,908	1,32,683	5,84,599	22,93,46,959	8,752	25,09,864	5,93,351	23,18,56,823	
1897	75,337	43,565	1,18,902	4,61,260	18,11,84,351	10,239	23,28,928	4,71,499	18,35,13,279	
1898	75,203	46,756	1,21,959	5,53,631	21,87,24,607	11,795	28,40,139	5,65,476	22,15,64,746	
1899	92,751	47,402	1,40,153	6,81,039	26,95,59,281	5,959	17,63,630	6,86,998	27,13,22,911	
1900	83,931	46,523	1,30,457	3,46,503	13,65,71,588	6,599	21,92,174	3,53,102	13,87,63,762	
1901	97,148	90,404	1,87,552	6,42,033	25,43,17,562	8,105	26,68,361	6,50,137	25,69,85,923	
1902	1,05,160	78,924	1,84,084	6,74,450	26,66,93,930	8,850	29,70,596	6,83,300	26,96,69,526	

Statement showing the arrivals of Cotton into Bombay by Sea and Rail during the years 1893 *to* 1902.

By	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.
	Cwts.	Cwts.	Cwts.	Cwts.	Cwts.	Cwts.	Cwts.	Cwts.	Cwts.	Cwts.
Steamers and Country Craft	19,24,666	16,42,612	16,32,228	15,05,213	8,68,732	9,45,430	14,24,785	5,58,829	5,48,171	7,13,185
B. B. & C. I. Railway	16,56,811	14,00,310	19,17,601	21,18,116	17,94,956	16,94,377	18,59,612	6,78,406	13,46,872	16,50,540
G. I. P. Railway	26,06,566	27,81,828	31,55,920	31,96,394	24,61,585	40,12,843	39,59,682	18,60,160	53,21,171	48,64,101
Total Cwts...	61,88,043	58,25,250	67,05,749	68,19,723	51,25,273	66,52,650	72,44,079	30,97,395	72,16,214	72,27,826
Total F.-P. Bales of 3½ Cwts. each...	17,68,012	16,64,367	19,15,929	19,48,491	14,64,375	19,00,766	20,69,734	8,84,977	20,61,775	20,65,091

Statement showing the Exports of Cotton to Europe, China, Japan, Calcutta, &c., from Bombay during the years 1893 *to* 1902.

To	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.
	F. P. Bales.	F. P. Bales.	F. P. Bales.	F. P. Bales.	F. P. Bales.	F. P. Bales.	F. P. Bales.	F. P. Bales.	F. P. Bales.	F. P. Bales.
Europe	8,57,771	7,97,070	6,24,465	7,72,358	5,11,899	4,90,544	5,00,232	2,32,425	5,60,434	5,77,929
China	1,627	5,679	4,902	32,347	29,261	24,532	68,131	15,570	89,214	59,934
Japan	1,02,868	1,08,037	1,39,031	2,79,277	3,78,106	4,40,735	4,88,985	1,61,124	4,77,045	4,41,753
Calcutta and other Ports	58,130	49,845	40,951	43,285	40,997	35,730	14,446	16,337	17,668	12,063
Total Bales...	10,20,396	9,60,631	8,09,349	11,27,167	9,60,263	9,91,541	10,71,794	4,25,456	11,44,361	10,91,679

EXPORTS OF BOMBAY MANUFACTURED PIECE-GOODS AND YARNS FROM BOMBAY PORT ONLY.

(From Official Returns.) 1901-02. *(Years ending 31st March.)*

EXPORTED TO	LENGTH AND WEIGHT.							VALUE.					
	Piece-Goods.		Yarns.	Percentage of		Total Weight.		Lakhs of Rupees.		Percentage of		Total Value in Lakhs of Rupees.	Percentage.
	Millions of [000's omitted.]			Goods.	Yarns.	Millions of lbs. [000's omitted.]	Percentage.	(000's omitted.)		Goods.	Yarns.		
	Yards.	lbs.	lbs.	%	%		%	Goods.	Yarns.	%	%	[000's omitted.]	%
Foreign Ports	44·08	*11·02	246·58	13·88	87·96	257·60	71·60	†62·22	844·54	15·44	87·27	‡906·76	66·16
Indian Ports	127·77	*31·94	29·41	40·22	10·49	61·35	17·05	163·43	108·12	40·57	11·17	271·55	19·81
Interior by Rail	*145·81	36·45	4·36	45·90	1·55	40·81	11·35	177·20	15·08	43·99	1·56	192·28	14·03
Total Indian...	273·58	68·39	33·77	86·12	12·04	102·16	28·40	340·63	123·20	84·56	12·73	463·83	33·84
GRAND TOTAL...	317·66	79·41	280·35	100·00	100·00	359·76	100·00	402·85	967·74	100·00	100·00	1,370·59	100·00

* Assuming 4 yards to be equivalent to 1 lb. and *vice versa* (reduced from 4·33 yards, the basis in years previous to 1895-96).
† Piece-Goods only, value *including all other sorts* (Handkerchiefs, Hosiery, &c., &c.) 66·76 lakhs, or
‡ Inclusive of Yarns 911·30 lakhs of Rupees.

1900-1901.

Foreign Ports	38·37	*9·59	113·83	17·06	77·58	123·42	60·82	† 54·00	401·22	19·16	76·39	‡455·22	56·40
Indian Ports	92·62	*23·15	29·43	41·19	20·06	52·58	25·91	114·75	111·44	40·71	21·22	226·19	28·03
Interior by Rail	*93·88	23·47	3·46	41·75	2·36	26·93	13·27	113·13	12·57	40·13	2·39	125·70	15·57
Total Indian...	186·50	46·62	32·89	82·94	22·42	79·51	39·18	227·88	124·01	80·84	23·61	351·89	43·60
GRAND TOTAL...	224·87	56·21	146·72	100·00	100·00	202·93	100·00	281·88	525·23	100·00	100·00	807·11	100·00

* Assuming 4 yards to be equivalent to 1 lb. and *vice versa* (reduced from 4·33 yards, the basis in years previous to 1895-96).
† Piece-Goods only, value *including all other sorts* (Handkerchiefs, Hosiery, &c., &c.) 58·68 lakhs, or
‡ Inclusive of Yarns 459·90 lakhs of Rupees.

1899-1900.

Foreign Ports	48·06	*12·01	219·46	20·69	87·74	231·47	75·11	†63·26	625·46	23·38	86·55	‡688·72	69·34
Indian Ports	86·01	*21·50	27·37	37·04	10·94	48·87	15·86	109·38	86·56	40·42	11·98	195·94	19·73
Interior by Rail	*98·12	24·53	3·30	42·27	1·32	27·83	9·03	97·97	10·59	36·20	1·47	108·56	10·93
Total Indian...	184·13	46·03	30·67	79·31	12·26	76·70	24·89	207·35	97·15	76·62	13·45	304·50	30·66
GRAND TOTAL...	232·19	58·04	250·13	100·00	100·00	308·17	100·00	270·61	722·61	100·00	100·00	993·22	100·00

* Assuming 4 yards to be equivalent to 1 lb. and *vice versa* (reduced from 4·33 yards, the basis in years previous to 1895-96).
† Piece-Goods only, value *including all other sorts* (Handkerchiefs, Hosiery, &c., &c.) 68·37 lakhs, or
‡ Inclusive of Yarns 693·83 lakhs of Rupees.

FOREIGN COUNTRIES TO WHICH GREY COTTON PIECE-GOODS OF BOMBAY MANUFACTURE HAVE BEEN EXPORTED SINCE 1895-96.

(From Government Returns.) *(Years ending 31st March.)*

Description.	To	In Millions of Yards (0000's omitted.)						
		1901-02.	1900-01.	1899-1900.	1898-99.	1897-98.	1896-97.	1895-96.
T-Cloths	Mozambique	1·76	2·34	4·11	3·71	3·72	2·85	4·16
	Zanzibar	3·79	2·43	4·42	5·65	6·39	8·69	6·30
	Aden	1·47	·45	2·24	2·05	2·53	·95	·75
	China (Hongkong)	.....	·14	·07	·29	·27	·35	2·16
	Do. (Treaty Ports*)	·19	·23	1·56	1·02	1·34	5·05	7·31
	Mekran and Sonmiani	·14	·15	·15	·21	·24	·04	·13
	Abyssinia	·97	2·36	1·80	1·35	·09	1·80	·65
	Other Countries	1·53	1·43	2·92	2·44	3·05	2·38	2·81
	Total	9·85	9·53	17·27	16·72	17·63	22·11	24·27
Sheetings	Abyssinia	.....	·03	·01	·03	·10	·22	2·95
	Mozambique	·01	·01	·03	·06	·75	1·08	1·61
	Zanzibar	·05	·14	1·61	3·25	3·07	3·47	5·84
	Aden	·25	·09	·13	·23	·45	·85	1·80
	Arabia	·16	·05	·17	·36	·64	·76	·68
	China (Treaty Ports*)	.....	·06	·11	·03	.....	·68	·84
	Other Countries	·38	·54	·19	·20	·39	·96	1·52
	Total	·85	·94	2·25	4·16	5·40	8·02	15·24
Domestics	Aden	3·22	2·02	2·89	3·60	4·96	5·40	8·59
	Arabia	·09	·08	·12	·11	·11	·13	·25
	Other Countries	·26	·43	·38	·14	·25	·34	·27
	Total	3·57	2·53	3·39	3·85	5·32	5·87	9·11
Drills and Jeans	Zanzibar	.....	...	.....	.....	.....	.....	...
	Aden	·03	...	·29	.....	·02	.....	...
	Other Countries	·02	·08	·09	·02	.....	·10	·02
	Total	·05	·08	·38	·02	·02	·10	·02
Long Cloths	Abyssinia	·71	1·93	·53	1·37	·03	2·42	2·18
	Mozambique	2·54	2·15	1·03	·88	·60	·28	...
	Zanzibar	2·61	·60	·86	·23	·41	1·58	·30
	Aden	4·51	2·68	3·83	3·55	5·07	2·20	1·74
	China (Treaty Ports*)	·03	·16	1·60	·26	·08	·40	2·50
	Arabia	·43	·16	·49	·14	·44	·24	1·19
	Persia	·23	·32	·05	·40	·51	·59	·55
	Straits	·04	·29	·18	·10	·05	·06	·15
	Turkey in Asia	2·84	1·36	1·89	1·46	1·31	2·30	2·44
	Egypt	·37	·69	·67	·71	·17	·17	1·68
	Other Countries	·08	·09	·62	·45	·22	·36	·13
	Total	14·39	10·43	11·75	9·55	8·89	10·60	12·86
Chudders	Aden	·44	·40	·64	·62	·46	·65	·66
	Zanzibar	2·39	1·90	1·49	1·62	1·89	2·00	1·27
	Other Countries	1·22	1·29	1·29	1·18	1·04	·86	1·05
	Total	4·05	3·59	3·42	3·42	3·39	3·51	2·98
Dhooties	Aden	·14	·02	·02	·04	·02	·08	·03
	Other Countries	·15	·22	·14	·22	·12	·04	·30
	Total	·29	·24	·16	·26	·14	·12	·33
Other Sorts	Total	1·95	3·96	4·45	1·67	·52	·21	·09
	Grand Total	35·00	31·30	43·07	39·65	41·31	50·54	64·90

* Almost entirely to Shanghai.

DESCRIPTIONS OF GREY COTTON PIECE-GOODS OF BOMBAY MANUFACTURE EXPORTED TO FOREIGN PORTS SINCE 1894-95.

(*From Government Returns.*) (*Years ending 31st March.*)

Description.	In Millions of Yards (0000's omitted).							
	1901-92.	1900-1901.	1899-1900.	1898-99.	1897-98.	1896-97.	1895-96.	1894-95.
T-Cloths	9·85	9·53	17·27	16·72	17·63	22·11	24·27	20·79
Sheetings	·85	·94	2·25	4·16	5·40	8·02	15·24	16·60
Domestics	3·57	2·53	3·39	3·85	5·32	5·87	9·11	9·06
Drills and Jeans	·05	·08	·38	·02	·02	·10	·02	·01
Long Cloths	14·39	10·43	11·75	9·55	8·89	10·60	12·86	13·07
Chudders	4·05	3·59	3·42	3·42	3·39	3·51	2·98	3·18
Dhooties	·29	·24	·16	·26	·14	·12	·33	·33
Other sorts	1·95	3·96	4·45	1·67	·52	·21	·09	·10
Total Millions of Yards...	35·00	31·30	43·07	39·65	41·31	50·54	64·90	63·14
Total Lakhs of Rupees ..	45·06	38·97	52·36	47·11	49·22	61·16	80·54	75·95

EXPORTS OF BOMBAY SPUN TWIST BY SEA AND RAIL. REDUCED TO BALES OF 400 lbs. EACH.

January 1st to December 31st.	To China.	To Japan.	Total to China and Japan.	Total to other ports.	Total Exports by Sea.	Total Exports by Rail.	Total Exports by Sea and Rail.
1880	63,194	4,527	67,721	38,825	106,546	14,092	120,638
1881	61,783	7,378	69,161	41,092	110,253	14,333	124,586
1882	81,434	9,854	91,288	41,502	132,790	14,400	147,190
1883	94,982	17,421	112,403	42,130	154,533	9,091	163,624
1884	127,318	13,846	141,164	48,226	189,390	6,049	195,439
1885	154,517	19,020	173,537	43,197	216,734	5,129	221,863
1886	199,407	20,543	219,950	45,103	265,053	4,649	269,702
1887	205,158	39,730	244,888	47,799	292,687	3,451	296,138
1888	234,071	52,697	286,768	49,789	336,557	2,250	338,807
1889	254,697	62,220	316,917	59,326	376,243	1,615	377,858
1890	325,060	37,722	362,782	67,201	429,983	13,942	443,925
1891	365,038	10,939	375,977	78,136	454,113	9,147	463,260
1892	385,771	21,445	407,216	69,547	476,763	7,850	484,613
1893	297,572	14,198	311,770	88,130	399,900	9,139	409,039
1894	338,703	10,743	349,446	105,863	455,309	10,388	465,697
1895	374,119	2,515	376,634	104,871	481,505	7,443	488,948
1896	471,023	2,467	473,490	99,877	573,367	6,274	579,641
1897	361,221	645	361,866	91,095	452,961	5,822	458,783
1898	437,645	475	438,120	108,691	546,811	7,125	553,936
1899	579,619	250	579,869	94,029	673,898	4,408	678,306
1900	253,331	100	253,431	87,998	341,429	5,480	346,909
1901	536,195	.....	536,195	99,599	635,794	6,876	642,670
1902	555,487	.....	555,487	111,259	666,746	7,427	674,173

QUALITIES OF YARNS OF BOMBAY MANUFACTURE EXPORTED TO FOREIGN PORTS SINCE 1894-95.

(*From Government Returns.*) (*Years ending 31st March.*)

Description.	In Millions of lbs. (0000's omitted).							
	1901-02.	1900-01.	1899-1900.	1898-99.	1897-98.	1896-97.	1895-96.	1894-95.
Mule No. 15s and under	116·14	48·56	125·28	95·82	68·62	50·93	49·37	43·63
„ „ 16s to 24s	129·05	63·89	92·92	101·21	100·05	124·44	121·65	101·99
„ „ 25s to 32s	·29	·27	·16	·17	·13	·18	·21	·42
„ „ 33s to 44s	·04	·14	·03	...	...	·15	·02	·10
Total ...	245·52	112·86	218·39	197·20	168·80	175·70	171·25	146·14
Water No. 20s and under	...	...	...	...	·27	·07	·01	·03
„ „ 21s to 30s	...	...	...	...	...	...	...	...
„ „ 31s to 40s	...	...	...	...	...	...	·01	...
Total ...	...	...	...	...	·27	·07	·02	·03
Colored Yarns ... ... Total ...	1·06	·97	1·07	·70	·99	·85	1·10	·86
Total Yarns ...	246·58	113·83	219·46	197·90	170·06	176·62	172·37	147·03

FOREIGN COUNTRIES TO WHICH YARNS OF BOMBAY SPINNING HAVE BEEN EXPORTED SINCE 1894-95.

(*From Government Returns.*) (*Years ending 31st March.*)

Quality.	To	In Millions of lbs.							
		1901-02.	1900-01.	1899-1900.	1898-99.	1897-98.	1896-97.	1895-96.	1894-95.
Mule No. 15s and under.	Aden	·76	·63	1·68	·98	1·24	·85	·86	1·50
	Japan	...	...	·02	...	...	...	...	...
	China (Hongkong) ...	43·70	34·82	57·29	62·75	43·07	32·99	35·78	33·71
	China (Treaty Ports*)...	70·19	11·94	65·69	31·18	23·62	16·37	12·13	7·74
	Other Countries ...	1·49	1·17	·60	·91	·68	·72	·60	·68
	Total ...	116·14	48·56	125·28	95·82	68·62	50·93	49·37	43·63
61s to 24s	Aden	·67	·42	·51	·50	·58	·45	·42	·54
	Japan	...	...	·12	·04	·35	·64	1·21	2·58
	China (Hongkong) ...	53·17	34·17	35·70	49·86	47·74	59·41	53·00	57·12
	China Treaty Ports*)...	68·87	23·86	52·98	44·40	46·06	59·44	62·58	35·05
	Straits	3·15	3·05	2·22	3·71	3·16	2·57	2·54	4·25
	Other Countries ...	3·19	2·39	1·39	2·71	2·16	1·93	1·90	2·45
	Total ...	129·05	63·89	92·92	101·22	100·05	124·44	121·65	101·99
Above 24s	Total ...	·33	·41	·19	·16	·14	·33	·23	·52
	Total Mule ...	245·52	112·86	218·39	197·20	168·81	175·70	171·25	146·14
Water.....	„ Water ...	...	...	...	...	·27	·07	·02	·03
Colored	„ Colored ...	1·06	·97	1·07	·70	·99	·85	1·10	·86
	Grand Total ...	246·58	113·83	219·46	197·90	170·07	176·62	172·37	147·03
	Value in Lakhs of Rs...	844·54	401·22	625·46	590·69	594·78	648·92	629·60	525·80

* Almost entirely to Shanghai.

COTTON.

RECEIPTS at, and Exports from, Bombay Port, also Mill consumption in the Island of Bombay. In thousands of Bales (000's omitted).

Years ending 30th June.

Years ending 30th June.	Receipts.	Exports to			Mill consumption.	Total.	Years ending 30th June.	Receipts.	Exports to			Mill consumption	Total.
		Europe.	Elsewhere.	Total.					Europe.	Elsewhere.	Total.		
1859	.....	490	152	642			1881	1,244	874	60	934	273	1,207
1860	.....	566	202	768	Maxm. up to this	Exports year.	1882	1,832	1,521	87	1,608	277	1,885
							1883	1,770	1,335	95	1,430	313	1,743
1861	.....	835	61	896	American War.		1884	1,759	1,295	100	1,395	348	1,743
1862	.....	911	8	919	In 1863 and 1864		1885	1,139	791	70	861	392	1,253
1863	.....	867	3	870	Bombay Imported from	Cotton China.	1886	1,480	1,009	61	1,070	391	1,461
1864	.....	1,065	1	1,066			1887	1,703	1,147	40	1,187	454	1,641
1865	.....	1,187	14	1,201	42	1,243	1888	1,472	893	58	951	500	1,451
1866	.....	1,277	5	1,282	46	1,328	1889	1,851	1,286	46	1,332	565	1,897
1867	.....	1,030	48	1,078	47	1,125	1890	2,235	1,488	71	1,559	636	2,195
1868	.....	1,225	56	1,281	48	1,329	1891	2,020	1,070	107	1,177	762	1,939
1869	.....	1,115	50	1,165	49	1,214	1892	1,770	905	202	1,107	728	1,835
1870	.....	967	39	1,006	50	1,056	1893	1,738	816	169	985	734	1,709
1871	1,085	1,002	48	1,050	52	1,102	1894	1,769	908	159	1,067	731	1,798
1872	1,151	1,079	34	1,113	53	1,166	1895	1,540	525	143	668	815	1,483
1873	978	917	34	951	67	1,018	1896	2,151	800	346	1,146	849	1,995
1874	1,311	1,192	25	1,217	83	1,300	1897	1,612	603	405	1,008	703	1,711
1875	1,345	1,285	20	1,305	135	1,440	1898	1,730	424	409	833	817	1,650
1876	1,073	980	35	1,015	147	1,162	1899	2,033	578	520	1,098	951	2,049
1877	1,141	920	38	958	161	1,119	1900	988	117	444	561	745	1,306
1878	961	800	46	846	204	1,050	1901	1,890	620	340	960	696	1,656
1879	832	652	64	716	181	897	1902	2,142	525	732	1,257	987	2,244
1880	1,171	874	34	908	220	1,128	...						

STATISTICS OF COTTON SPINNING AND WEAVING IN THE INDIAN MILLS in the twelve months, April 1902 to March 1903, compared with the corresponding period of 1900-1901 and 1901-1902.

No. 1.—ABSTRACT STATEMENT of the QUANTITY (in pounds) of YARN Spun.

	Twelve months, 1st April to 31st March.		
	1900-1901.	1901-1902.	1902-1903.
British India.			
Bombay	243,625,528	415,028,240	419,526,005
Madras	27,652,764	32,120,814	31,256,104
Bengal	16,290,973	45,403,254	47,085,551
United Provinces of Agra and Oudh (also Ajmer-Merwara)	29,245,454	33,589,403	27,050,371
Punjab	7,235,343	9,629,422	9,587,025
Central Provinces	18,726,985	24,233,715	24,306,984
TOTAL ...	342,777,547	560,004,848	558,812,040
Foreign Territory.			
Hyderabad Assigned Districts and the Native States of Indore, Mysore, Baroda, Nandgaon, Bhavnagar, Hyderabad (*a*), Wadhwan (*b*), Quilon (*c*), and also Pondichery (*d*)	10,195,540	12,933,318	17,422,486
GRAND TOTAL ...	352,973,087	572,938,166	576,234,526

(*a*) From September 1902. | (*b*) From October 1902. | (*c*) From November 1902. | (*d*) For January 1903.

No. 2.—ABSTRACT STATEMENT of the QUANTITY of WOVEN GOODS Produced.

[N.B.—The weight in pounds represents the weight of all woven goods ; the measure in yards represents the equivalent of the weight of grey goods.

		Twelve months, 1st April to 31st March.		
		1900-1901.	1901-1902.	1902-1903.
British India.				
Bombay	pounds.	80,689,445	98,545,580	100,465,618
	yards.	296,699,720	352,376,716	346,471,461
Madras	pounds.	5,709,687	6,073,322	4,995,069
	yards.	3,804,842	6,850,130	6,418,592
Bengal	pounds.	320,126	392,846	414,856
	yards.	950,194	1,308,714	1,341,214
United Provinces of Agra and Oudh (also Ajmer-Merwara)	pounds.	3,635,276	4,537,808	4,585,527
	yards.	12,646,653	16,120,461	13,984,361
Punjab	pounds.	404,258	272,695	177,510
	yards.	1,215,742	720,468	412,306
Central Provinces	pounds.	5,085,798	6,143,908	6,646,052
	yards.	15,050,510	18,685,976	17,421,450
TOTAL ...	pounds.	95,844,590	115,966,159	117,284,632
	yards.	330,367,661	396,062,465	386,049,384
Foreign Territory.				
Hyderabad Assigned Districts and the Native States of Indore, Mysore, Baroda, Nandgaon, Bhavnagar, Hyderabad (*a*), Wadhwan (*b*), and Pondichery (*c*) ...	pounds.	2,902,976	3,684,526	5,489,382
	yards.	10,809,281	13,682,528	20,267,333
GRAND TOTAL ...	pounds.	98,747,566	119 650,685	122,774,014
	yards.	341,176,942	409,744,993	406,316,717

(*a*) From September 1902. | (*b*) From October 1902. | (*c*) For January 1903.

No. 3.—DETAILED STATEMENT of the QUANTITY (in pounds) and the COUNTS (or numbers) of YARN Spun.

Count or Number.	Twelve Months, 1st April to 31st March.			Count or Number.	Twelve Months, 1st April to 31st March.		
	1900-01.	1901-02.	1902-03.		1900-01.	1901-02.	1902-03.
	BOMBAY.				**MADRAS.**		
1	50,435	60,937	19,859	1	....	14,294	8,624
2	18,805	6,023	63,174	2	....	13,791	37,526
3	....	....	....	3	....	....	49
4	25,980	131,378	346,947	4	246,796	344,444	379,056
5	23,772	79,287	....	5	....	....	....
6	5,387,340	9,566,852	11,775,346	6	765,253	1,105,659	1,049,544
7	189,958	768,406	2,015,172	7	....	....	12,270
8	2,099,537	2,422,945	3,276,402	8	748,271	389,939	632,239
9	722,841	1,148,958	1,510,702	9	.. ..	2,601	18,020
10	49,665,923	115,625,448	97,181,715	10	992,720	1,418,457	1,335,966
Total Nos. 1 to 10	58,184,691	129,810,234	116,189,317	Total Nos. 1 to 10	2,753,040	3,289,185	3,473,293
11	3,717,316	11,590,663	13,366,068	11	32,773	70,977	58,258
12	19,598,027	28,855,657	29,953,900	12	1,083,785	1,055,086	1,077,231
13	3,530,378	5,409,910	6,132,046	13	144,612	160,029	195,985
14	1,714,791	2,839,596	2,877,319	14	3,203,817	2,868,706	2,126,271
15	604,091	664,592	604,304	15	440,733	562,479	821,504
16	11,291,061	34,327,086	23,541,196	16	2,705,669	2,959,336	2,164,429
17	2,850,176	6,094,586	6,994,643	17	1,123,897	1,120,652	1,270,661
18	3,772,664	6,303,136	6,394,142	18	389,071	2,587,285	3,047,432
19	2,239,413	2,117,769	1,509,109	19	2,395,624	2,684,384	2,074,796
20	75,014,696	112,311,632	127,703,977	20	9,546,212	10,808,513	10,899,658
Total Nos. 11 to 20	124,332,511	210,514,627	219,076,704	Total Nos. 11 to 20	21,066,193	24,827,447	23,736,225
21	10,037,657	10,603,745	15,877,769	21	961,749	699,417	847,815
22	14,311,151	17,416,837	17,793,108	22	423,024	439,684	553,583
23	1,327,017	2,268,874	2,175,292	23	....	....	11,204
24	11,542,749	15,505,224	16,258,728	24	169,170	167,704	99,586
25	523,217	508,373	921,832	25	.....	....	....
26	3,484,851	5,410,086	7,090,361	26	215,447	555,451	412,882
27	178,141	94,777	238,426	27	....	.....	....
28	2,340,622	3,857,251	4,904,393	28	15,790	14,968	115,663
29	10,675	1,122	781	29	....	....	....
30	6,266,536	7,936,573	7,847,535	30	728,068	1,033,806	1,138,521
Total Nos. 21 to 30	50,022,510	63,503,262	73,108,205	Total Nos. 21 to 30	2,513,248	2,911,030	3,179,254
31	151,213	192,090	219,925	31	....	....	....
32	2,917,600	4,259,798	3,408,853	32	....	....	14,751
33	443,580	918,518	1,366,065	33	....	....	....
34	1,010,674	1,314,024	2,136,734	34	....	....	....
35	179,505	108,251	295,492	35	....	....	....
36	526,441	487,000	850,920	36	....	....	....
37	13	2,567	....	37	....	....	....
38	43,542	63,538	34,595	38	....	....	....
39	9,945	131,048	54,294	39	....	....	....
40	3,607,615	2,987,950	2,262,958	40	967,088	1,026,367	791,481
Total Nos. 31 to 40	8,890,128	10,444,784	10,629,836	Total Nos. 31 to 40	967,088	1,026,367	806,232
Above 40	2,195,689	755,833	521,943	Above 40	353,195	66,785	61,100
Total ..	243,625,528	415,028,240	419,526,005	Total ..	27,652,764	32,120,814	31,256,104

No. 3.—DETAILED STATEMENT of the QUANTITY (in pounds) and the COUNTS (or numbers) of YARN Spun—continued.

Count or Number.	Twelve Months, 1st April to 31st March.			Count or Number.	Twelve Months, 1st April to 31st March.		
	1900-1901.	1901-02.	1902-03.		1900-1901.	1901-02.	1902-03.
BENGAL.				**UNITED PROVINCES OF AGRA & OUDH (ALSO AJMER-MERWARA).**			
1	4,671	7,007	5,389	1	....	....	....
2	208,778	410,241	330,556	2	....	....	....
3	4,070	42,099	6,787	3	....	....	....
4	8,535	64,382	171,225	4	356,906	732,715	523,259
5	....	160	1,327	5	....	....	4,229
6	271,251	1,105,366	756,166	6	203,781	265,167	5,393
7	2,391	116,907	381,920	7	125,059	117,937	104,696
8	80,235	614,977	941,519	8	144,623	346,977	193,080
9	....	....	168,204	9	610,231	684,253	813,879
10	4,874,661	20,569,592	16,537,350	10	6,078,793	6,798,464	4,622,138
Total Nos. 1 to 10	5,454,592	22,930,721	19,300,443	Total Nos. 1 to 10	7,519,393	8,945,513	6,266,674
11	1,081,873	1,984,947	2,685,112	11	2,607,872	3,030,905	2,409,400
12	2,019,514	5,738,411	4,919,791	12	3,831,098	3,929,426	2,547,682
13	579,013	1,141,324	1,280,032	13	2,329,352	2,064,634	2,934,767
14	1,228,908	1,758,629	2,125,380	14	2,778,601	4,110,563	1,703,934
15	144,793	403,863	805,259	15	2,548,889	3,727,995	3,340,225
16	1,404,831	4,875,600	5,502,035	16	3,471,906	3,503,769	4,141,310
17	408,666	499,321	1,167,023	17	868,735	748,010	425,033
18	1,529,567	2,574,016	2,788,778	18	2,607,849	2,182,740	1,888,393
19	....	....	395,796	19	57,952	20,747	87,290
20	1,488,390	2,400,652	3,790,882	20	406,634	841,627	958,974
Total Nos. 11 to 20	9,880,555	21,377,263	25,460,088	Total Nos. 11 to 20.	21,508,888	24,160,416	20,437,208
21	247,478	375,608	778,670	21	14,180	1,742	4,694
22	324,040	306,087	820,702	22	68,103	98,888	32,568
23	....	....	....	23	1,566	1,002	16,845
24	174,779	201,321	472,491	24	60,113	284,433	200,935
25	3,929	71,106	71,923	25	....	....	....
26	....	42,966	17,276	26	6,305	13,144	8,051
27	....	....	480	27	25,640	26,612	5,781
28	....	....	....	28	3,655	....	30,777
29	69,261	....	481	29	....	....	....
30	4,692	59,528	140,945	30	338	12,009	5,868
Total Nos. 21 to 30	824,179	1,056,616	2,302,918	Total Nos. 21 to 30	179,900	437,830	305,519
31	....	....	....	31	....	....	....
32	....	....	21,766	32	....	857	9,876
33 to 35	....	....	....	33	....	....	....
36	....	....	....	34	2,153	....	2,644
37 to 39	....	....	....	35	....	....	....
40	71,211	32,442	336	36	12,275	7,911	426
Total Nos. 31 to 40	71,211	32,442	22,102	37	....	....	....
				38	....	33,417	....
				39	....	....	....
				40	1,261	....	9,638
Above 40	60,436	6,202	....	Total Nos. 31 to 40	15,689	42,185	22,584
				Above 40	21,584	8,459	18,886
Total ..	16,290,973	45,403,254	47,085,551	Total ..	29,245,454	33,589,403	27,050,371

No. 3.—DETAILED STATEMENT of the QUANTITY (in pounds) and the COUNTS (or numbers) of YARN Spun—continued.

Count or Number.	Twelve Months, 1st April to 31st March.			Count or Number.	Twelve Months, 1st April to 31st March.		
	1900-1901.	1901-02.	1902-03.		1900-1901.	1901-02.	1902-03.
PANJAB.				**CENTRAL PROVINCES.**			
1	....	....	....	1	....	....	....
2	....	....	....	2	....	....	799
3	....	....	....	3	....	618	....
4	....	....	....	4	36,707	51,359	109,589
5	....	....	....	5	....	....	....
6	13,866	597	....	6	579,789	1,097,325	880,153
7	....	....	....	7	....	....	....
8	4,144	29,629	10,135	8	632,306	1,112,813	1,080,699
9	227	....	....	9	14,973	53,501	82,545
10	230,210	431,945	487,399	10	2,296,189	3,209,542	4,060,310
Total Nos. 1 to 10	248,447	462,171	497,534	Total Nos. 1 to 10	3,559,964	5,525,658	6,214,095
11	1,475,476	2,060,605	2,205,950	11	202,135	417,285	174,235
12	54,973	699,217	72,546	12	3,814,905	5,405,052	4,194,607
13	2,876,709	4,172,348	4,384,262	13	447,913	532,959	330,074
14	215,999	123,128	359,006	14	1,020,709	1,308,824	1,501,782
15	797,225	985,620	737,366	15	153,021	163,196	193,269
16	979,295	881,178	917,286	16	2,020,759	2,835,773	2,754,099
17	288,621	51,215	137,195	17	263,900	194,589	187,410
18	18,484	....	....	18	497,370	761,952	778,629
19	....	....	....	19	9,607	116,022	136,721
20	164,585	124,275	194,302	20	2,963,478	2,932,049	3,122,061
Total Nos. 11 to 20	6,871,367	9,097,586	9,007,913	Total Nos. 11 to 20	11,392,797	14,667,701	13,372,887
21	7,296	3,967	17,963	21	283,228	635,638	834,932
22	79,500	6,513	16,947	22	1,743,503	1,896,086	2,155,809
23	....	....	....	23	....	....	320
24	14,344	23,886	33,842	24	215,078	323,870	585,184
25	....	....	....	25	....	....	....
26	771	....	1,002	26	87,303	67,723	58,810
27	330	....	....	27	....	....	....
28	....	....	....	28	8,460	4,548	2,975
29	....	....	....	29	....	....	....
30	....	....	2,146	30	393,816	141,699	162,674
Total Nos. 21 to 30	102,741	34,366	71,900	Total Nos. 21 to 30	2,736,388	3,069,564	3,750,664
31	....	....	....	31	....	....	....
32	....	....	....	32	716,394	775,878	748,415
33	....	....	....	33	....	....	....
34	....	....	....	34	1,727	....	....
35	....	....	....	35	....	....	....
36 to 39	....	....	....	36	5,766	7,280	....
40	11,572	23,684	9,678	37	....	....	....
				38	....	....	14,597
Total Nos. 31 to 40	11,572	23,684	9,678	39	....	....	....
				40	247,091	117,007	133,270
Above 40	1,716	11,615	....	Total Nos. 31 to 40	971,478	900,165	896,282
				Above 40	66,358	70,627	73,066
Total ..	7,235,843	9,629,422	9,587,025	Total ..	18,726,985	24,233,715	24,306,984

No. 3.—DETAILED STATEMENT of the QUANTITY (in pounds) and the COUNTS (or numbers) of YARN Spun—concluded.

TOTAL OF BRITISH INDIA.

Count or Number.	Twelve months, 1st April to 31st March.		
	1900-1901.	1901-02.	1902-03.
1	55,106	82,238	33,872
2	227,683	430,055	432,055
3	4,070	42,717	6,836
4	674,924	1,324,778	1,530,076
5	23,772	79,447	5,556
6	7,221,280	13,140,966	14,466,602
7	317,408	1,003,250	2,514,058
8	3,709,116	4,917,280	6,134,073
9	1,348,272	1,889,313	2,593,350
10	64,138,496	148,053,448	124,224,878
TOTAL Nos. 1 to 10	77,720,127	170,963,492	151,941,356
11	9,117,445	19,155,382	20,899,026
12	30,402,302	45,682,849	42,765,954
13	9,907,977	13,481,204	15,257,166
14	10,162,825	13,009,446	10,693,692
15	4,688,752	6,507,745	6,501,927
16	21,872,521	49,382,742	39,020,355
17	5,803,995	8,708,873	10,181,965
18	8,815,005	14,409,129	14,897,374
19	4,702,594	4,888,922	4,203,712
20	89,578,895	129,418,748	146,669,854
TOTAL Nos. 11 to 20	195,052,311	304,645,040	311,091,025
21	11,556,588	12,320,117	18,361,843
22	16,949,321	20,164,095	21,372,717
23	1,328,577	2,269,976	2,203,661
24	12,176,233	16,506,438	17,600,716
25	527,246	579,479	993,735
26	3,799,169	6,089,370	7,588,382
27	204,611	121,389	244,687
28	2,368,527	3,876,767	5,053,308
29	10,675	1,122	1,212
30	7,458,019	9,033,915	9,297,089
TOTAL Nos. 21 to 30	56,378,966	71,012,668	82,718,450
31	151,213	192,090	219,925
32	3,634,494	5,036,533	4,203,661
33	443,580	918,518	1,366,065
34	1,014,554	1,314,024	2,136,734
35	179,505	108,251	295,492
36	544,482	482,191	853,990
37	13	2,567	.....
38	43,542	96,955	49,192
39	9,945	131,048	54,294
40	4,905,838	4,187,450	3,207,361
TOTAL Nos. 31 to 40	10,927,166	12,469,627	12,386,714
Above 40	2,698,977	914,021	674,495
TOTAL	342,777,547	560,004,848	558,812,040

No. 4.—DETAILED STATEMENT of the QUANTITY (in pounds) and the COUNTS (or numbers) of YARN Spun.

BERAR, NATIVE STATES and FOREIGN TERRITORY.

Count or Number.	Twelve months, 1st April to 31st March.		
	1900-1901.	1901-02.	1902-03.
1	.....	.....	.....
2	.....	.....	.....
3	55,378	54,182	46,326
4	45	.....	6,133
5	.....	.....	.....
6	539,196	894,666	643,013
7	2,701	134,485	488,992
8	531,189	879,086	413,905
9	.....	78,466	306,124
10	1,970,526	1,916,194	1,665,022
TOTAL Nos. 1 to 10 ...	3,149,035	3,957,079	3,569,515
11	467,349	386,234	768,380
12	741,674	1,127,108	1,025,509
13	182,746	276,981	307,084
14	212,864	641,007	817,215
15	123,724	224,275	81,552
16	355,728	720,047	1,324,858
17	298,531	370,014	345,657
18	658,556	438,770	1,108,809
19	238,732	671,314	465,108
20	2,307,948	2,057,573	4,211,287
TOTAL Nos. 11 to 20 ...	5,687,852	6,913,323	10,455,459
21	427,122	818,295	1,404,640
22	405,190	488,993	699,583
23	34,211	32,249	212,085
24	192,099	171,604	240,525
25	484	3,564	.....
26	81,511	138,235	232,830
27	.....	.....	.....
28	26,975	139,751	296,886
29	.....	.....	.....
30	46,292	128,306	184,818
TOTAL Nos. 21 to 30 ...	1,213,884	1,920,987	3,271,366
31	.....	.....	.....
32	58,438	72,204	94,834
33	.....	.....	16,160
34	55,970	67,126	13,478
35	114	.....	.....
36	.....	.....	37
37 to 39	.....	.....	.....
40	24,418	2,599	1,637
TOTAL Nos. 31 to 40 ...	138,940	141,929	126,146
Above 40 ...	5,829	.....	.....
TOTAL ...	10,195,540	12,933,318	17,422,486

No. 5.—DETAILED STATEMENT of the QUANTITY (in pounds and their equivalent in yards) and DESCRIPTION of WOVEN GOODS Produced.

Description of Goods.	Twelve Months, 1st April to 31st March.					
	1900-1901.	1901-02.	1902-03.	1900-1901.	1901-02.	1902-03.
	BOMBAY.			**MADRAS.**		
Grey Goods—						
Chadars ... ... pounds	8,766,748	11,952,110	12,661,595	449	696	2,690
yards	23,018,007	32,303,648	35,344,133	1,575	2,784	10,540
Dhutis ... ... pounds	14,874,265	18,424,740	19,654,284	111,942	234,139	234,610
yards	69,233,993	85,262,641	89,290,616	379,011	871,617	840,843
Drills and jeans ... pounds	407,127	424,206	518,772	212,689	282,518	321,206
yards	1,315,138	1,438,004	1,865,762	633,925	828,290	891,913
Jaconets ... ... pounds	90,466	101,333	78,476	.....	.....	.....
yards	567,282	653,921	503,934	.....	.....	.....
Madapollams ... pounds	542,810	99,674	13,028	.....	.....	.....
yards	2,623,601	715,310	102,758	.....	.....	.....
Mulls ... ... pounds	7,325	24,460	17,159	.....	.....	.....
yards	52,925	131,808	122,592	.....	.....	.....
Printers ... ... pounds	718,024	963,260	1,678,299	.....	.....	.....
yards	3,957,933	4,756,078	7,848,321	.....	.....	.....
Shirtings and long-cloths ... ... pounds	29,615,051	32,566,683	29,900,036	... ..	6,782	103,408
yards	126,414,964	138,352,195	126,638,313	.....	24,324	347,452
T. Cloths, domestics and sheetings ... pounds	11,143,524	15,361,426	14,166,284	480,042	1,138,778	1,056,585
yards	54,497,460	73,024,415	66,876,562	1,558,666	3,917,446	3,601,101
Other kinds ... ... pounds	4,039,396	4,509,233	5,035,916	568,530	509,107	356,907
yards	15,018,417	15,739,696	17,877,470	1,231,665	1,205,669	726,743
TOTAL ... pounds	70,204,536	84,427,125	83,723,849	1,373,652	2,172,030	2,075,406
yards	296,699,720	352,376,716	346,471,461	3,804,842	6,850,130	6,418,592
White and Coloured Goods pounds	10,097,460	13,660,504	16,275,621	4,336,035	3,901,302	2,919,663
Hosiery ... ... „	387,449	457,951	466,148	.....	.....	.....
TOTAL ...	80,689,445	98,545,580	100,465,618	5,709,687	6,073,332	4,995,069

Description of Goods.	Twelve Months, 1st April to 31st March.					
	1900-1901.	1901-02.	1902-03.	1900-1901.	1901-02.	1902-03.
	BENGAL.			**UNITED PROVINCES of AGRA and OUDH (also AJMER-MERWARA).**		
Grey Goods—						
Chadars ... ... pounds	106,612	52,206	83,475	1,726	15,399	8,852
yards	285,663	176,658	246,692	5,212	36,659	27,664
Dhutis ... ... pounds	37,901	68,303	71,657	1,173,686	1,860,590	1,402,862
yards	171,587	311,749	328,580	4,692,200	7,233,915	5,812,513
Drills and jeans ... pounds	677	266	60	302,280	286,937	248,237
yards	3,372	401	216	830,483	793,791	667,151
Jaconets ... ... pounds	.....	.....	.....	.....	.....	.....
yards	.....	.....	.....	.....	.....	.....
Madapollams ... pounds	.....	.....	.....	1,200	.....	.....
yards	.....	.....	.....	7,488	.....	.....
Mulls ... ... pounds	.....	.....	.....	1,065	.....	.....
yards	.....	.....	.....	7,404	.....	.....
Printers ... ... pounds	.....	.....	56	.....	.....	180,855
yards	.....	.....	204	.....	.....	691,094
Shirtings and long-cloths ... ... pounds	11,558	29,585	65,784	90,349	700,453	1,136,482
yards	40,560	120,573	203,880	434,121	2,861,008	4,270,200
T. Cloths, domestics and sheetings ... ... pounds	112,833	146,073	76,704	803,480	725,029	688,004
yards	449,012	632,689	371,641	2,397,937	2,101,024	2,066,786
Other kinds ... pounds	1	12,307	18,897	1,952,194	820,519	150,218
yards	.....	76,644	90,601	4,271,808	3,044,064	448,953
TOTAL ... pounds	269,582	308,540	316,583	3,625,980	4,408,927	3,815,510
yards	950,194	1,308,714	1,341,214	12,646,653	16,120,461	13,984,361
White and Coloured Goods pounds	50,544	84,306	98,273	9,296	128,881	770,017
Hosiery ... ... „	.....	.....	.....	.....	.....	.....
TOTAL ...	320,126	392,846	414,856	3,635,276	4,537,808	4,585,527

No. 5.—DETAILED STATEMENT of the QUANTITY (in pounds and their equivalent in yards) and DESCRIPTION of WOVEN GOODS produced—continued.

PANJAB.

DESCRIPTION.		TWELVE MONTHS, 1ST APRIL to 31ST MARCH.		
		1900-01.	1901-02.	1902-03.
Grey Goods—				
Chadars	pounds	35,640	.....	8,195
	yards	91,098	.....	25,976
Dhutis	pounds	150,520	127,858	50,115
	yards	481,597	383,950	147,522
Drills and jeans	pounds	7,559	39	352
	yards	21,520	120	1,000
Jaconets	pounds	.....	.....	.....
	yards	.....	.....	.....
Madapollams	pounds	.....	.....	.....
	yards	.....	.....	.....
Mulls	pounds	.....	.....	.....
	yards	.....	.....	.....
Printers	pounds	.....	.....	.....
	yards	.....	.....	.....
Shirtings and longcloths	pounds	17,742	.....	.....
	yards	55,327	.....	.....
T. Cloths, domestics and sheetings	pounds	90,460	76,448	74,395
	yards	354,269	282,629	282,282
Other kinds	pounds	102,337	62,672	2,441
	yards	211,951	113,769	5,776
TOTAL	pounds	404,258	267,017	135,498
	yards	1,215,742	720,468	412,306
White and Coloured Goods	pounds	.....	5,678	42,012
Hosiery	„	.....	.....	.....
TOTAL PANJAB	„	404,258	272,695	177,510

CENTRAL PROVINCES.

Grey Goods—				
Chadars	pounds	278,176	521,016	810,462
	yards	694,325	1,535,254	2,309,843
Dhutis	pounds	1,029,075	958,349	725,496
	yards	4,509,228	4,271,198	3,318,100
Drills and jeans	pounds	89,710	89,893	120,354
	yards	280,785	269,431	373,870
Jaconets	pounds	.....	.....	.....
	yards	.....	.....	.....
Madapollams	pounds	.....	.....	.....
	yards	.....	.....	.....
Mulls	pounds	.....	125	1,501
	yards	.....	1,187	14,508
Printers	pounds	.....	41,432	146,332
	yards	.....	178,446	628,230
Shirtings and longcloths	pounds	1,023,503	1,350,905	1,239,459
	yards	4,259,619	5,469,360	5,009,147
T. Cloths, domestics and sheetings	pounds	404,427	672,021	705,980
	yards	2,136,439	3,822,317	4,146,283
Other kinds	pounds	880,147	992,800	627,025
	yards	3,170,114	3,138,783	1,626,469
TOTAL	pounds	3,705,038	4,626,541	4,376,507
	yards	15,050,510	18,685,976	17,421,460
White and Coloured Goods	pounds	1,380,760	1,517,367	2,269,545
Hosiery	„	.....	.....	.....
TOTAL CENTRAL PROVINCES	„	5,085,798	6,143,908	6,646,052

No. 5.—DETAILED STATEMENT of the QUANTITY (in pounds and their equivalent in yards) and DESCRIPTION of WOVEN GOODS produced—concluded.

TOTAL OF BRITISH INDIA.

DESCRIPTION.		TWELVE MONTHS, 1ST APRIL to 31ST MARCH.		
		1900-01.	1901-02.	1902-03.
Grey goods—				
Chadars	pounds	9,189,351	12,541,427	13,575,269
	yards	24,095,880	34,055,003	38,064,248
Dhutis	pounds	17,377,289	21,673,880	22,139,024
	yards	79,467,616	98,385,070	99,737,974
Drills and jeans	pounds	1,020,042	1,083,859	1,208,981
	yards	3,085,223	3,330,037	3,800,912
Jaconets	pounds	90,466	101,333	78,476
	yards	567,282	652,921	503,934
Madapollams	pounds	544,010	99,674	13,028
	yards	2,631,089	715,310	102,758
Mulls	pounds	8,390	24,585	18,660
	yards	60,329	132,995	137,100
Printers	pounds	718,024	1,004,692	2,005,442
	yards	3,957,933	4,934,524	9,162,849
Shirtings and longcloths	pounds	30,758,203	34,654,408	32,445,119
	yards	131,204,591	146,827,460	136,468,992
T. cloths, domestics and sheetings.	pounds	13,034,566	18,119,775	16,767,952
	yards	61,393,783	83,710,520	77,294,605
Other kinds	pounds	6,842,605	6,906,537	6,191,402
	yards	23,903,935	23,818,625	20,776,012
TOTAL	pounds	79,583,046	96,210,170	94,443,353
	yards	330,367,661	396,062,465	386,049,384
White and Coloured Goods.	pounds	15,874,095	19,298,038	22,375,131
Hosiery	„	387,449	457,951	466,148
TOTAL	„	95,844,590	115,966,159	117,284,632

No. 6.—DETAILED STATEMENT of the QUANTITY (in pounds and their equivalent in yards) and DESCRIPTION of WOVEN GOODS produced.

BERAR, NATIVE STATES and FOREIGN TERRITORY.

Description.		Twelve Months, 1st April to 31st March.		
		1900-1901.	1901-1902.	1902-1903.
Grey Goods—				
Chadars	pounds ...	177,946	232,627	273,373
	yards ...	400,182	530,722	819,198
Dhutis	pounds ...	1,021,520	835,755	1,082,044
	yards ...	4,372,159	3,557,877	4,585,022
Drills and jeans	pounds ...	70,468	98,163	151,868
	yards ...	224,330	317,237	473,372
Jaconets	pounds ...	.....	.....	.....
	yards ...	.....	.....	.....
Madapollams	pounds ...	.....	.....	.....
	yards ...	.....	.....	.....
Mulls	pounds ...	.....	.....	.....
	yards ...	.....	.....	.....
Printers	pounds ...	9,998	120,792	338,283
	yards ...	51,016	529,393	1,408,618
Shirtings and longcloths	pounds ...	615,930	840,082	1,418,617
	yards ...	2,553,186	3,460,348	5,581,086
T. cloths, domestics and sheetings	pounds ...	246,048	397,507	1,075,501
	yards ...	1,227,361	2,199,014	4,943,862
Other kinds	pounds ...	531,692	821,476	709,781
	yards ...	1,981,047	3,087,937	2,456,175
Total ...	pounds ...	2,673,602	3,346,402	5,049,467
	yards ...	10,809,281	13,682,528	20,267,333
White and Coloured Goods	pounds ...	229,374	338,124	439,915
Hosiery	,, ...	.....	.....	.....
Total ,, ...		2,902,976	3,684,526	5,489,382

No. 7.—STATEMENT of the AMOUNT (in Rupees) of EXCISE DUTY assessed on goods woven in the Cotton Mills in India, under the Cotton Duties Act II of 1896.

	1900-01.	1901-02.	1902-03.
British India.			
Bombay	10,28,542	15,26,103	15,84,121
Madras	41,827	54,139	67,813
Bengal	5,038	5,863	6,605
United Provinces of Agra and Oudh (also Ajmer-Merwara).	50,116	69,284	74,023
Panjab	5,806	4,379	3,032
Central Provinces	80,588	1,07,730	1,20,089
TOTAL, GROSS DUTY ...	12,11,917	17,67,498	18,55,683
„ NET DUTY ...	11,62,947	17,16,836	18,16,517
Foreign Territory.			
Hyderabad Assigned Districts and the Native States of Indore, Mysore, Baroda, Nandgaon and Bhavnagar.			
GROSS DUTY ...	48,449	61,171	74,496
NET DUTY... ...		61,129	
GRAND TOTAL, GROSS DUTY ...	12,60,366	18,28,669	19,30,179
„ NET DUTY... ...	12,11,396	17,77,965	18,91,013

BOMBAY MILLOWNERS' ASSOCIATION.

COTTON SPINNING AND WEAVING MILLS WORKING
AND
IN COURSE OF ERECTION IN INDIA
ON
30th JUNE 1902.

FREDERICK NOEL-PATON,
Secretary.

REPORT

OF THE

BOMBAY MILLOWNERS' ASSOCIATION

FOR THE YEAR 1903.

PRESENTED TO THE ANNUAL GENERAL MEETING HELD ON 15th APRIL, 1904.

LIBRARY OF THE BOMBAY BRANCH OF THE ROYAL ASIATIC SOCIETY

Bombay:
PRINTED AT THE TIMES PRESS.

1904.

391-04

CONTENTS.

PAGE

MEMBERS AND COMMITTEE OF THE ASSOCIATION—

Rules and Regulations of the Association i
Rules for Primary Registration of Trade-Marks vi
Rules for the Secondary Registration of Trade-Marks already registered under the Old Rules x
Rules applicable to all Trade-Marks registered with the Association whether under the Old or the New Rules xii
Rules for the Election of a Representative of the Association on the Board of the Victoria Technical Institute xiii
Rules for the Election of a Representative of the Association to serve on the Board of the Bombay Improvement Trust xiv

REPORT OF THE COMMITTEE—

Trade-Marks Registration with the Association 1
Do. Secondary Registration 5
Do. Register (Subject Index) 6
Bombay Improvement Trust 7
Government Statistics ... ... 7—52
Discrepancy in Cotton Statistics 8
Progress of the Mill Industry 9
Comparison of Cotton Consumption with Yarn Production 11
Shipments of Yarn 13
Indian Markets 15
Economic Factors affecting the Trade 15
Cotton Prices 16
Imports of British Goods into China and Japan 16
Ventilation of Factories ... ... 19—54
Industrial Water Charges 24
Factories Act—Shuttle Guards ... ... 26—65
Protection of Machinery ... ... 27—66
Boiler Act (Guarding of Safety Valves) ... ... 27—68
Inspection of Boilers (appointment of a Senior Inspector) ... ... 29—74
Factories Act (Urinals) ... ... 29—75
Hours and Duration of Attendance of Spinning Masters and Engineers of Cotton Mills 30
Indian Electricity Acts ... ... 30—76
Income Tax and the depreciation on Factory Buildings ... ... 31—79
Bonus and Accident Fund and Permanent Dispensaries for Mill-hands ... ... 33—91
Housing of Mill-hands ... ... 34—99
Municipal Taxation 35
Reduction in the rates of Freight on Cotton from Bombay to China ... ... 36—105
Railway Charges for Carriage of Mill Produce 36
Municipal Licenses (Coal Storage on Bunders) ... ... 36—106

REPORT OF THE COMMITTEE—*concld.* PAGE

Municipal Licenses Storage of Oil ... ... 36.
Excise duties on cloth and the returns of production ... ... 37—113
Excise Duty on the calendered value of cloth ... ... 41—132
Revision of Tariff Values under the Cotton Duties Act 42
Short Reeling of Yarn in Indian Mills ... ... 44—135
Improvement of Indian Cotton ... ... 46—146
Official Registration of Trade-Marks ... ... 46—159
China Trade and the Abolition of the Likin 48
Industrial and Arts Exhibition, Madras 48
Office Organization 48
New Markets for Bombay Cotton Goods—Shipments of Yarn to the Levant ... 49
Committee, changes in 50
Holidays for 1904 50
Stocks of Cotton in Bombay 50
Statistics ... ... 50—181
Bombay Association of Fire Insurance Agents—Circulars affecting Mills... ... 50
Balance Sheet 51
Proceedings of the Annual General Meeting 169
Statement of Cotton Spinning & Weaving Mills working and in course of erection in India on 30th June 1903 ... ...

BOMBAY MILLOWNERS' ASSOCIATION.

ESTABLISHED 1ST FEBRUARY, 1875.

List of Members.

AHMEDABAD SPINNING AND WEAVING COMPANY, LIMITED.
AHMEDABAD DYEING AND MANUFACTURING COMPANY, LD.
ALLIANCE COTTON MANUFACTURING COMPANY, LIMITED.
APOLLO MILLS.
BARODA STATE SPINNING AND WEAVING MILLS.
BENGAL-NAGPORE MILLS COMPANY, LIMITED.
BERAR MANUFACTURING COMPANY, LIMITED.
BOMBAY COTTON PRESS COMPANY, LIMITED.
BOMBAY COTTON MANUFACTURING COMPANY, LIMITED.
BOMBAY UNITED SPINNING AND WEAVING COMPANY.
BRITANNIA MILLS, LIMITED.
CENTRAL INDIA SPINNING, WEAVING AND MANUFACTURING COMPANY, LIMITED.
CENTURY SPINNING AND MANUFACTURING COMPANY, LIMITED.
CHINA MILLS, LIMITED.
CITY OF BOMBAY MANUFACTURING COMPANY, LIMITED.
CONNAUGHT MILLS COMPANY, LIMITED.
COLABA LAND AND MILL COMPANY, LIMITED.
CORAL MILLS COMPANY, LIMITED.
CURRIMBHOY MILLS COMPANY, LIMITED.
DAMODHUR LUKHMIDAS MILLS COMPANY, LIMITED.
DAVID MILLS COMPANY, LIMITED.
E. D. SASSOON MILL.
ELPHINSTONE MILL.
EMPEROR EDWARD SPINNING, WEAVING AND MANUFACTURING COMPANY, LIMITED.
EMPRESS SPINNING AND WEAVING COMPANY, LIMITED.
FRAMJEE PETIT SPINNING AND MANUFACTURING COMPANY, LIMITED.
GODAVERY VALLEY GINNING AND PRESSING COMPANY, LIMITED.
GOKAK WATER POWER AND MANUFACTURING COMPANY, LIMITED.
HINDOOSTAN SPINNING AND WEAVING MILLS COMPANY, LIMITED.
HINGUNGHAT MILL COMPANY, LIMITED.
HOWARD AND BULLOUGH MILLS COMPANY, LIMITED.
HYDERABAD (DECCAN) SPINNING AND WEAVING COMPANY, LIMITED.
IMPERIAL COTTON MILLS COMPANY, LIMITED.
INDIAN MANUFACTURING COMPANY, LIMITED.
INDO-CHINA MANUFACTURING COMPANY, LIMITED.
JAMES GREAVES MILLS COMPANY, LIMITED.
JAMSHED MANUFACTURING COMPANY, LIMITED.
JEWRAJ BALLOO SPINNING AND WEAVING COMPANY, LIMITED.
JUBILEE MANUFACTURING COMPANY, LIMITED.
JULGAON COTTON GINNING COMPANY, LIMITED.
JULGAON MANUFACTURING COMPANY, LIMITED.
KHANDEISH SPINNING AND WEAVING MILLS COMPANY, LIMITED.
KHATAO MAKANJI SPINNING AND WEAVING COMPANY, LIMITED.
KOHINOOR MILLS COMPANY, LIMITED.
KRISHNA MILLS, LIMITED.
LAKHMIDAS KHIMJEE SPINNING AND WEAVING COMPANY, LIMITED.
LAXMI COTTON MILLS COMPANY, LIMITED.
LEOPOLD SPINNING, BLEACHING AND MANUFACTURING COMPANY, LIMITED.
LORD REAY MANUFACTURING COMPANY, LIMITED.
MADHAVJEE DHARAMSEY MANUFACTURING COMPANY, LD.
MADRAS UNITED S. AND W. COMPANY, LIMITED.
MADURA MILLS, LIMITED.
MANOCKJEE PETIT MANUFACTURING COMPANY, LIMITED.
MOON MILLS, LIMITED.
MORARJEE GOCULDAS SPINNING AND WEAVING COMPANY, LIMITED.
MUIR MILLS COMPANY, LIMITED.
NEW EMPRESS SPINNING AND WEAVING COMPANY, LIMITED.
NEW GREAT EASTERN SPINNING AND WEAVING COMPANY, LIMITED.
NEW PACHORA MANUFACTURING COMPANY, LIMITED.
NICOL MILLS.
OOMRI GINNING AND PRESSING COMPANY, LIMITED.
PARBHANI GINNING AND PRESSING COMPANY, LIMITED.
PRESIDENCY MILLS COMPANY, LIMITED.
QUEEN SPINNING AND WEAVING COMPANY, LIMITED.
RAO SAHEB REKCHAND AND PRAYAGDAS MOHTA'S SPINNING AND WEAVING MILL.
REHMANI MILL.
RIPON MANUFACTURING COMPANY, LIMITED.
SARASWATI MILLS COMPANY, LIMITED.
SASSOON SPINNING AND WEAVING COMPANY, LIMITED.
SHOLAPORE SPINNING AND WEAVING COMPANY, LIMITED.
SHRI GANGAJI COTTON MILLS COMPANY, LIMITED.
SOONDERDAS SPINNING AND WEAVING MILLS COMPANY, LIMITED.
SOUTHERN MARATHA S. AND W. COMPANY, LIMITED.
STANDARD MILLS COMPANY, LIMITED.
SWADESHI MILLS COMPANY, LIMITED.
SWAN MILLS, LIMITED.
TEXTILE MANUFACTURING COMPANY, LIMITED.
TRICUMDAS MILLS, LIMITED.
UNION MILLS, LIMITED.
VEERAMGAM SPINNING, WEAVING AND MANUFACTURING COMPANY, LIMITED.
VICTORIA MILLS.
WALLACE FLOUR MILLS COMPANY.
WESTERN INDIA SPINNING AND MANUFACTURING COMPANY, LIMITED.

COMMITTEE FOR 1904.

SASSOON J. DAVID, ESQ. (*Chairman.*)
THE HON'BLE MR. VITHALDAS DAMODHER THACKERSEY (*Deputy Chairman.*)
S. A. NATHAN, ESQ.
AHMEDBHAI HUBIBBHOY, ESQ.
DINSHAW E. WACHA, ESQ.
W. H. BRADY, ESQ.
GORDHANDAS KHATAW, ESQ.
MANMOHANDAS RAMJEE, ESQ.
BOMONJEE DINSHAW PETIT, ESQ.
N. B SAKLATWALA, ESQ.
SIR DINSHAW M. PETIT, BART.
D. C. SHROFF, ESQ.
JAMSHEDJI ARDASHER WADIA, ESQ.
SIR J. COWASJEE JEHANGHIR.
NARANDAS PURSHOTUMDAS, ESQ.
N. N. WADIA, ESQ.
C. N. WADIA, ESQ.
H. E. E. PROCTER, ESQ.
HERBERT R. GREAVES, ESQ.
FAZULBHOY CURRIMBHOY IBRAHIM, ESQ.

FREDERICK NOEL-PATON, ESQ., *Secretary.*

RULES AND REGULATIONS.

I.—The Association shall be called the Bombay Millowners' Association.

II.—The objects of the Association are—

(*a*) The protection of the interests of Millowners and users of steam, water $\frac{\text{and}}{\text{or}}$ electric power in India.

(*b*) The promotion of good relations between the persons and bodies using such power.

(*c*) The doing of all those acts and things by which these objects may be furthered.

III.—Any individual, partnership or Company owning one or more mill or mills or one or more factory or factories actuated by steam, water $\frac{\text{and}}{\text{or}}$ electric power shall be admissible to membership on $\frac{\text{his}}{\text{their}}$ paying in advance the annual subscription and on $\frac{\text{his}}{\text{their}}$ signing in the form prescribed in Section V an undertaking to conform to the Rules of the Association.

IV.—The subscriptions to be paid by any individual, partnership or Company on entering the Association shall be as follows :—

(*a*) Rupees 5 per annum for every 1,000 spindles $\frac{\text{and}}{\text{or}}$ Rs. 5 per every 100 looms set up in the mill or mills, factory or factories that at the time of subscription belong to the said individual, partnership or Company.

(*b*) Rupees 5 per annum for every Rs. 50,000 of the estimated value of machinery, buildings, $\frac{\text{and}}{\text{or}}$ land shown on the audited balance sheet of such factory or factories, not being Spinning and Weaving Mills, as may, at the time of subscription, belong to the said individual, partnership or Company.

Provided that the minimum subscriptions payable by any one member shall be Rs. 50 per annum.

V.—The form of adherence to the rules of the Association, to be signed by members as provided in Rule III, shall be as follows :—

In consideration of the protection afforded by the members of the Bombay Millowners' Association to the Trade-Mark and Tickets used by $\frac{me}{us}$ *and in consideration of the general maintenance by the Association of the interest of the industry in which* $\frac{I\ am}{we\ are}$ *engaged* $\frac{I}{we}$, ..., *engaged in* ..... *in the town of* ..... *having carefully read and fully understood all the rules of the said Association, and the Rules relating to Registration of Trade-Marks, do hereby declare and agree that* $\frac{I}{we}$ *will during* $\frac{my}{our}$ *membership of the said Association in all things conform faithfully and absolutely to all the said rules and to such other rules as the Association shall institute by resolution duly passed in accordance with the relevant provisions herein, that* $\frac{I}{we}$ *will register with the Association all the Trade-Marks applied by* $\frac{me}{us}$ *to any the produce of the mill or mills, factory or factories, owned by* $\frac{me}{us}$, *that all trade-marks so applied by* $\frac{me}{us}$ *whether they be registered with the Association or not, shall be subject to the rules of the Association, that* $\frac{I}{we}$ *will submit to arbitration any dispute or disputes in which* $\frac{I}{we}$ *may be concerned with another member or members of the Association in respect of a Trade-Mark or Trade-Marks, and that* $\frac{I}{we}$ *will in all things endeavour to further the objects of the Association.*

VI.—Membership of the Association shall terminate on the expiry of three months' notice given to the Secretary in writing by a member of the Association of his intention to resign membership. Any member may, for any act done, or conduct pursued by such member, in contravention of the Rules of the Association or to its detriment or discredit, or injurious to its welfare and interests, be expelled from the Association by a majority of three-fourths of the members present at a general meeting specially convened by the Committee of the Association to consider the act or conduct in question, and a resolution passed by such majority that the act or conduct in question was in contravention of the Rules of the Association, or was detrimental or discreditable thereto or injurious to its welfare and interests, and that the member responsible for such act or conduct is expelled in consequence of the same, shall be in every respect conclusive. *Provided always* that, at some time before the passing of such resolution, the member responsible for the act or conduct complained of shall be afforded a full opportunity of being heard in defence or explanation in regard thereto.

VII.—Every individual, partnership or Company being a member of the Association shall have the right to give by its representative one vote on any motion put to a general meeting of the Association.

VIII.—The person or persons empowered to act and vote on behalf of an individual or partnership as a member of the Association shall be either a partner or a person signing *per procuration* for the said individual or partner. The person or persons empowered to act and vote on behalf of a public Company as a member shall be either one or more of the Board of Directors or the Agent, Secretary or Manager of the Company or that individual or a member of that firm which shall act as Secretary, Treasurer or Agent, or a person authorised by that individual or firm to sign *per procuration.*

IX.—The name or names of the person or persons empowered to vote on behalf of an individual, partnership or Company as a member of the Association shall be registered with the Association in order of precedence, and no person not so registered shall have power to so act or vote.

X.—If two or more individuals representing the same partnership or public Company be present at any meeting, only that one of the said individuals who takes priority in the order of precedence registered by the said partnership or Company with the Association shall vote. Provided always that the votes of a plurality of members represented by a single individual or partnership may be recorded either by one or more persons having the aforesaid qualifications to vote and being registered with the Association to that effect.

XI.—One-fourth of the members of the Association shall be a sufficient quorum to form any general meeting other than the annual general meeting provided for under Rule XXIII, when due notice of the intention to hold such meeting has been given in manner hereinafter set forth; but if within thirty minutes after the time appointed for the meeting such quorum be not present, the meeting shall be adjourned to such time on the following day or other day as the members present may determine. Previous notice of such adjourned meeting to be given in one or more of the English and one or more of the Vernacular newspapers published in Bombay. If at such adjourned meeting the quorum be not present, those members who are present shall be the quorum and may transact the business for which the meeting was called.

XII.—The affairs and funds of the Association shall be managed by a Committee of twenty members, consisting of a Chairman, a Vice-Chairman and eighteen members, of whom seven members shall retire by rotation in each *year*, but be eligible for re-election. The appointment or re-appointment of members to fill these seven vacancies shall be made at the Annual General Meeting of the Association.

XIII.—The Chairman of the Committee shall, if present, preside at all meetings of the Association or of the Committee held during his term of office. In the absence of the Chairman the Vice-Chairman shall preside, and failing both of these the Chair shall be taken by one of the members of the Committee to be appointed by the other members of the Committee present on the occasion.

XIV.—The names of the members whom it is proposed to appoint as Chairman and Vice-Chairman of the Committee for the ensuing year, as also the names of the seven members of Committee who retire but are eligible for re-election, shall be circulated amongst the members at least seven days before the Annual General Meeting, and no two members of any one *firm* or *Company* shall be eligible to serve on the Committee at the same time. Provided always that the fact of a member's holding a share or shares in a Company represented by another member of Committee shall not prejudice any right he may possess under Rule VIII to vote on behalf of another firm or Company.

XV.—In case of a tie in voting either in Committee or in General Meeting the Chairman for the time being shall have a casting vote.

XVI.—In the event of the death or resignation of the Chairman or Vice-Chairman or of any member of the Committee, a fresh appointment shall be made by the Committee.

XVII.—Five members of the Committee present in person shall form a sufficient quorum at any meeting of the Committee.

XVIII.—The Committee shall meet at least once in every month, and oftener if need be.

XIX.—A Secretary shall be appointed by the members and his remuneration shall be fixed by the Committee. His duties shall be to keep the records and accounts of the Association, to collect subscription, paying the same into the Bank of Bombay, or such other bank as may be approved by the Committee in this behalf, to the credit of the Association's account, to consider all proposed legislative measures or any other matter that may affect the interest of the Association and generally to act in the Association's interest under the orders of the Committee.

XX.—Minutes of all proceedings of the Association in Committee or in General Meeting shall be made and entered regularly in a minute book to be kept by the Secretary. This book shall be open to the inspection of any members at any reasonable time.

XXI.—The Committee for the time being shall have the control of the funds of the Association, and pay all necessary expenses and generally manage its affairs. They may disburse money from the Association's funds either by way of loan or gift for the purpose of furthering any of the objects for the carrying out of which the Association is formed. They may advance money either by way of loan or gift to any member of the Association to assist him in conducting or defending a law suit or carrying on an arbitration if in their opinion the principles involved in the said suit or arbitration affect the interests of the members as a body, and they may do all other things calculated to promote the general objects of the Association. Provided always that no one sum exceeding Rs. 2,000 shall be advanced by way of loan or gift by the Committee without the sanction of a majority of the members present at a general meeting to be called to sanction such gift or loan, and that, if at any time during any year the disbursements of the Committee, after providing for ordinary expenditure, such

as Secretary's salary, printing, stationery, &c., amount to seven-eighths of the funds remaining in hand, then the Committee shall call a general meeting and lay the accounts before the members of the Association. For every annual general meeting the Committee shall prepare a statement of the accounts of the Association which shall be circulated amongst the members seven days prior to the date of the meeting.

XXII.—The Committee may, from time to time, appoint a Sub-Committee or Sub-Committees to investigate and to report upon particular matters, and may invite any member of the Association not being a member of the Committee to act on such a Sub-Committee if for any special reason such a course may seem to them advisable. But a Sub-Committee shall have no executive or substantive power nor shall its recommendations be of any effect unless and until such recommendations are ratified by the Committee.

XXIII.—The Annual General Meeting of the Association shall be held at such time as the Committee may appoint, and the Committee may at any time call a general meeting should it seem to them expedient to do so. Seven days' notice of any annual general meeting and of any other general meeting, other than a general meeting adjourned under the circumstances contemplated by Rule XI, shall be given by an advertisement in one or more of the English and one or more of the Vernacular newspapers published in Bombay. Any four members may by a requisition addressed to the Committee and accompanied by a statement of reasons request them to call a general meeting of members, and the Committee on receipt of such a requisition shall call a meeting to be held on the earliest convenient day.

XXIV.—All the moneys or funds of the Association shall be paid into an account to be opened with the Bank of Bombay or such other Bank as may be approved by the Committee in this behalf in the name of the Association. All cheques on that account shall be signed by the Chairman, or in his absence by the Acting Chairman and one member of the Committee.

XXV.—Solicitors to the Association shall be appointed by the Committee who may advise with them when necessary.

XXVI.—Neither the Chairman, Vice-Chairman, nor any member of Committee nor the Secretary shall be answerable for anything other than his own acts or defaults, nor shall he be answerable for any act done by him for the sake of conformity only, or for any moneys of the Association other than such as shall come into his own hands, or for any collector or receiver of moneys appointed by the Committee, or for any misfortune, loss or damage happening to the Association by reason of any deed done or executed by him as a Chairman, Vice-Chairman or member of the Committee, or by reason of any error in judgment or mere indiscretion on his part in the performance of his duties, or otherwise on any account, except for wilful negligence or fraud. Every person being Chairman, Vice-Chairman, or a member of the Committee, his heirs, executors, or administrators, shall at all times be indemnified and saved harmless out of the funds of the Association from and against all costs, losses, damages and expenses whatsoever incurred or sustained by him in the execution of his powers or duties, and every person having been or being a Chairman, Vice-Chairman, or member of Committee, or Secretary of the Association, his heirs, executors, and administrators, shall be indemnified and saved harmless, out of the funds of the Association, against all actions, suits, claims, and demands whatsoever, brought or made against him or them in respect of any engagement of the Association, save such as may be incurred by his own personal wilful neglect or default.

XXVII.—An annual report of the proceedings of the Association shall be prepared and printed for circulation amongst the members, and copies of this report may be sent to any similar Association or individuals or Corporations whom it may be likely to interest.

XXVIII.—These Rules shall come into force on the 1st day of January 1904. Up to that date the present Rules shall be in force. The foregoing Rules and copies of the form of undertaking prescribed under Rule V shall forthwith be printed and distributed to all members, and on and after the 1st day of October 1903 no member who has not duly signed and deposited with the Secretary the said form of undertaking shall be entitled to the privileges of membership. No alteration in these Rules shall be made save and except by a majority of three-fourths of the members of the Association present at a general meeting duly convened for the purpose of considering such alteration, the terms of which shall be fully set forth in the notice convening the said general meeting.

*XXIX.—At the first Meeting of Committee after the holding of the Annual General Meeting the Committee shall in each year appoint three members of the Committee to form a Sub-Committee for the purpose of deciding questions, other than arbitrations, under the Rules of the Association for the Registration of Trade-marks. Decisions of the said Sub-Committee in such questions shall have the same effect as if given by the whole Committee. Vacancies in the said Sub-Committee shall be filled up by the Committee.

* *Note.*—Rule XXIX was passed at the Annual General Meeting of the Association held on 15th April 1904.

RULES FOR PRIMARY REGISTRATION OF TRADE-MARKS.

Definition.—Throughout all the Rules of the Association—

The word "trade-mark" shall be understood to include the word "ticket."

All grey and/or bleached cotton yarns or threads shall be regarded as belonging to one and the same "class of goods."

All cotton yarns or threads, coloured in whole or in part, shall be regarded as belonging to a distinct "class of goods."

All cotton cloths shall be regarded as belonging to a third distinct "class of goods."

1. Every member shall at the earliest convenient date, after the 1st of May 1903, send to the Secretary with an application for registration a copy of every trade-mark applied and/or intended to be applied by such member to any the produce of the mill or mills, factory or factories, owned by such member, together with *that number of* spare copies of each trade-mark which the Committee may from time to time prescribe in this behalf, regard being had to the total number of the membership, and shall attach to each such copy a writing showing the class or classes of goods to which the applicant desires to apply the trade-mark in question.

2. The Secretary shall send to every member one such spare copy of every trade-mark submitted for primary registration, and shall intimate that the trade-mark in question will in one month's time be registered for use on the class or classes of goods specified unless some member shall, in the interval, formally object to such registration on the ground that the trade-mark submitted is a colourable imitation of a trade-mark already registered by the objector with the Association for use on one or more the class or classes of goods specified and by such objector habitually applied to such class or classes of goods. After *three weeks' delay a reminder* shall be sent by the Secretary to such members as have not replied in the interval. At the end of *one month* from the original distribution of copies the trade-mark in question shall be registered for use on all such specified class or classes of goods in respect of which no objection has been raised by a writing duly delivered to the Secretary.

3. Prior registration with the Association under these new Rules of a trade-mark for use on a class or classes of goods specified to that effect at time of registration shall *primâ facie* be held to secure to the member by whom such trade-mark has been so registered an exclusive right as against all other members of the Association to use the said trade-mark on the class or classes of goods so specified.

4. Any dispute arising out of an objection raised to the registration of a trade-mark, on the grounds stated in Rule 2, shall be referred to the *arbitration* of two disinterested parties, one to be chosen by each party to the dispute.

5. If the arbitrators disagree upon any issue or issues submitted to them, they shall refer the matter to an umpire to be agreed upon between them with the consent of their principals, and whose decision shall be final.

6. In any of the following cases :—

(*a*) if all the parties do not, after difference has arisen, proceed to the appointment of an arbitrator or arbitrators ;

(*b*) if an appointed arbitrator refuses to act or is incapable of acting or dies, and the party or parties do not supply the vacancy ;

(*c*) if the two arbitrators having disagreed fail to appoint within fourteen days a third arbitrator or umpire ;

(*d*) if an appointed umpire or third arbitrator refuses to act or is incapable of acting or dies and the parties or their arbitrators do not supply the vacancy ;

any party may serve the other party or parties with a notice, at the same time appointing an arbitrator, umpire or third arbitrator to supply the vacancy.

7. If such appointment be not agreed to $\frac{\text{and}}{\text{or}}$ the arbitration be not proceeded with within fourteen days after the service of the notice, the Committee may, on application by either party, appoint an umpire or a Special Committee of Arbitration which shall consist of three members and which shall have the like power to act in the reference and to make an award as if they had been appointed by consent of all parties and the award of such umpire or Special Committee of Arbitration shall be final.

8. If both arbitrators or the umpire or Committee of Arbitration decide that the trade-mark submitted for registration is a colourable imitation in the sense alleged of one already registered with the Association for application to the class or classes of goods to which the trade-mark submitted is designed to be applied, registration shall not be made and the member who has submitted it for registration shall forthwith desist from using the said trade-mark on such class or classes of goods.

9. If both arbitrators or the umpire or Committee of Arbitration decide that the trade-mark submitted is not a colourable imitation in the sense alleged, registration shall be made.

10. A member who has objected to the registration of a trade-mark for use by another member or any specified class or classes of goods, and whose objection has been disallowed by both arbitrators or by an umpire or by a Committee of Arbitration, shall offer no further opposition to the use of the said trade-mark by the member in whose name it is registered so far as concerns the class or classes of goods for which it is so registered. But such abstention shall in no way prejudice or affect the right of a member whose objection has been disallowed to object to the registration of the same trade-mark for use on other class or classes of goods or to the registration of another ticket.

11. When the arbitrators or umpire have made an award, they or he shall sign it and forward it to the Committee of the Association ; and all such awards shall be recorded by the Association and given effect to in the Association's Register.

12. The Committee may remit any award to the re-consideration of an umpire and may appoint any reasonable time within which a fresh award must be made, failing which they may proceed on application by either party to appoint an umpire or a Committee of Arbitration as under Rule 6 hereof. From the time of the making of such an appointment the right of the original arbitrators or umpire to make a fresh award shall terminate and any award he or they may thereafter make in the matter shall be void.

13. When an arbitrator or umpire has misconducted himself, the Committee may remove him or may quash the award in the making of which he was concerned and order or conduct a fresh arbitration.

14. The following fees shall be chargeable to members :—

(*a*) In cases where an umpire is appointed by the Committee under Rule 7 or 12, Rs. 15 only, of which Rs. 10 shall be paid by the Association to the said umpire. Such fee to be paid by the losing party.

(*b*) In cases where a Committee of Arbitration are appointed by the Committee, Rs. 35 only, of which Rs. 10 shall be paid to each member of the Committee of Arbitration. Such fee to be paid by the party applying for appointment of a Committee of Arbitration instead of an umpire.

15. Notwithstanding anything contained in the foregoing Rules or in the Form of Adherence prescribed under Rule 5 a member who has signed such form of adherence may, when sending in any trade-mark or trade-marks for registration with the Association, declare that he is not willing to refer to arbitration any dispute or disputes that may arise between him and any other member or members of the Association with respect to any one or more of such trade-marks (to be specified by him) on the ground that he has habitually applied the same to any the produce of a mill or mills, factory or factories owned by him. Provided that in the case of a member who shall at any time after the passing of this Rule have joined the Association for the first time, such declaration shall be made not later than one calendar month after his so joining the Association. Provided further that in the case of a member who first joined the Association at a date anterior to the passing of this Rule, such declaration shall be made not later than the 31st of May 1904, and shall be valid only if it relate to a trade-mark or trade-marks which he is able to show to the satisfaction of the Committee of the Association that he had before the 1st January 1904 habitually applied to any the produce of a mill or mills, factory or factories owned by him.

16. Trade-marks in respect of which such a declaration shall have been made in accordance with the provisions of the foregoing Rule 15 shall be subject to the procedure laid down in Rules 1 and 2 for Primary Registration. In case an objection in the terms of Rule 2 shall be made to the registration of such a trade-mark the Committee shall, in the case where the mark objected to is claimed by a newly joined member, release the parties interested, so far as the particular dispute in question is concerned, from their obligation to refer such dispute to arbitration; but where the trade-mark objected to is claimed by an old member, the Committee shall grant such release on the production by such member of evidence satisfactory to the Committee of the Association that the trade-mark or trade-marks in question was or were before the 1st of January 1904 habitually applied by him to any the produce of a mill or mills, factory or factories owned by him. When such release is granted the fact shall forthwith be communicated by the Committee to the parties to the dispute or disputes, and the registration of the trade-mark or trade-marks in disputes in the ordinary Register shall be postponed for a period of two calendar months from the date of such communication. The trade-mark or trade-marks so objected to shall on the expiration of one calendar month from the date of the application to register the same be temporarily registered in a special register to be called the Suspense Register. So long as any such trade-mark shall remain on the Suspense Register of the Association, priority of registration thereof on the Suspense Register shall have the same effect as prior registration under Rule 3 for Primary Registration in so far as it shall entitle the owner of such trade-mark to object in accordance with Rule 2 to the registration of any other trade-mark that may be submitted for registration. At any time within the aforesaid period of two calendar months any of the parties to any such dispute may institute such proceedings, civil or criminal, in the matter as he may be advised, and the result of such proceedings, if instituted, shall be awaited by the Association. If in such proceedings any of the trade-marks in dispute shall be held to be a colourable imitation of another of the trade-marks in dispute, then the trade-mark so held to be a colourable imitation shall be removed from the Suspense Register or from the Ordinary Register, as the case may be. If no legal proceedings in the matter shall be instituted by any of the parties to the disputes within the aforesaid period of two calendar months, or if legal proceedings having been instituted shall have been discontinued or finally decided in favour of the applicant for registration, then the trade-mark objected to shall be removed from the Suspense Register and registered in the Ordinary Register of the Association, unless other legal proceedings regarding the same mark shall be still undecided. The Association shall not alter the Suspense or Ordinary Register in respect of the disputed trade mark except upon the application of one or more of the

parties interested and upon what the Committee may deem sufficient evidence of the existence of the condition or conditions in this clause specified as justifying removal from or insertion in a register, as the case may be.

17. A trade-mark which is so transferred from the Suspense Register to the Ordinary Register shall be deemed to have been registered in the Ordinary Register as of the date when such trade-mark would have been registered therein had no objection to the registration thereof been taken.

Note.—Rules 15, 16 and 17 were passed at the Annual General Meeting of the Association held on 15th April 1904.

LIBRARY OF THE BOMBAY BRANCH OF THE ROYAL ASIATIC SOCIETY

RULES FOR THE SECONDARY REGISTRATION OF TRADE-MARKS ALREADY REGISTERED UNDER THE OLD RULES.

A.—All members are requested to send in to the Secretary a complete set of the trade-marks registered by them under the old Rules. Ten copies of each trade-mark should be forwarded, and such copies may be marked "FOR SECONDARY REGISTRATION PURPOSES ONLY."

B.—Each trade-mark registered under the old Rules should be accompanied by a statement showing—

(*a*) The class or classes of goods, if any, to which, at time of Primary Registration, it was specifically declared that the ticket was to be applied.

(*b*) The class or classes of goods, if any, to which the applicability of the trade-mark was clearly indicated by words, letters $\frac{\text{and}}{\text{or}}$ figures forming a part of, or an adjunct to, the design.

(*c*) The class or classes of goods, if any, to which the trade-mark has, in fact, been habitually applied by the applicant for registration.

(*d*) The class or classes of goods to which the applicant desires to apply the trade-mark.

C.—The said trade-marks shall be compared by the Secretary with those on the existing register; and a Sub-Committee of two members shall be appointed to advise the Secretary. The said Sub-Committee may require from any member applying for registration of a trade-mark all necessary information and sufficient proof regarding any question of fact as to the class or classes of goods to which any trade-mark has been habitually applied.

D.—Registration of a trade-mark, under the old Rules of the Association, shall constitute registration under these present Rules. But the right established by such registration, under the old Rules, shall, under the new Rules, be defined and limited by the following considerations :—

(*a*) If at the time of registering a trade-mark under the old Rules, the member registering it has specifically declared the class or classes of goods to which the said trade-mark was to be applied, the said member shall be entitled by virtue of such registration to use the said trade-mark only for application to the class or classes of goods so specifically declared, $\frac{\text{and}}{\text{or}}$ to which he has habitually applied it, and shall not by virtue of such registration have any right to use the said trade-mark on any other class or classes of goods or be entitled to oppose the registration of a similar trade-mark by another member for application to another class or classes of goods.

(*b*) If a trade-mark registered by a member under the old Rules bear, as part or as an adjunct to the design, words, letters $\frac{\text{and}}{\text{or}}$ figures clearly indicating the class or classes of goods to which the said trade-mark was to be applied, the said member shall be entitled by virtue of such registration to use the said trade-mark only for application to the class or classes of goods so indicated, $\frac{\text{and}}{\text{or}}$ to which he has habitually applied it, and shall not by virtue of such registration have any right to use the said trade-mark for any other class or classes of goods or be entitled to oppose the registration of a similar trade-mark by another member for application to any other class or classes of goods.

(*c*) If a trade-mark registered under the old Rules do not bear, as part of, or as an adjunct to, the design, words, letters $\frac{\text{and}}{\text{or}}$ figures clearly indicating the class or classes of goods to which it was to be applied, and if such registration of such a trade-mark have not been accompanied by a specific declaration of the class or classes of goods to which it was to be applied, the member who so registered such a trade-mark shall be entitled by virtue of such registration to register the said Trade-mark under the new Rules for use only on such the class or classes of goods to which he can show that he has, in fact, habitually applied it, and shall not have any right by virtue of such registration under the old Rules to oppose the registration of a similar trade-mark by another member for use on any other class or classes of goods.

(*d*) Provided that any member whose right of user in a trade-mark by virtue of registration under the old Rules is limited as above to application to a certain class or classes of goods may submit the said trade-mark to be registered for use on any other class or classes of goods, and such submission for registration shall be dealt with in accordance with the new Rules for Primary Registrations.

Note.—**The following Resolutions were adopted at the Annual General Meeting of the Association held on 15th April 1904 :—**

(1) Rules A, B and C of the Association's Rules for the Secondary Registration of trade-marks are hereby rescinded with effect from the 1st of November 1904: that on and after the said 1st of November the Old Register of trade-marks shall be null and void and that those trade-marks standing on the said Old Register and in respect of which registration under the Rules for Secondary Registration shall not have been completed by the 31st October 1904, shall thereafter be admissible only in conformity with the Rules for Primary Registration. Further, that Rule D down to the word "considerations" is hereby rescinded and the following words substituted: the Rule so amended becoming Rule A :—"The rights established by Secondary Registration if duly effected before the 1st November 1904 shall be defined and limited by the following considerations."

(2) That the following Ruling of Committee be added to the Rules for Secondary Registration of trade-marks :—

B. "That if membership of the Association in respect of a mill or mills shall have terminated, whether through failure to pay dues or otherwise, and if on the revival of membership in respect of such mill or mills, whether by the original owners or otherwise, and whether under the original name or otherwise, it shall be found that during the interval when the membership was in abeyance there have been registered with the Association a trade-mark or trade-marks alleged by the person reviving the membership to be a colourable imitation of a trade-mark or trade-marks previously registered with the Association by the mill or mills in respect of which membership is revived, then the owner or agent of such mill or mills shall have the right to protest at any time within fourteen days of the revival of membership against the registration already made of the trade-mark or trade-marks in question, and if necessary to demand arbitration either under Rule 4 or under Rule 7; and the award in such cases shall be binding on the parties and shall be given effect to in the Register of the Association."

RULES APPLICABLE TO ALL TRADE-MARKS REGISTERED WITH THE ASSOCIATION, WHETHER UNDER THE OLD OR THE NEW RULES.

(A)—All questions of fact as to the class or classes of goods to which a trade-mark has been habitually applied shall be decided by arbitration in accordance with the procedure laid down in that behalf in the new Rules for first registrations.

(B)—If two or more members shall have registered with the Association trade-marks which are found in practice to resemble each other so far as to cause inconvenience, such members may jointly refer the matter to arbitration for a decision as to their respective claims to the exclusive right of user, each party appointing his own arbitrator. Should such arbitrators not agree, the matter may, on joint application of both or all the disputants, be referred by the Committee of the Association to a Sub-Committee to be specially appointed for the purpose of the single arbitration. Such application must be accompanied (*a*) by a clear statement of the issues to be decided; (*b*) a written undertaking by all the parties jointly or severally to abide by the award to be given; (*c*) a fee of Rs. 20 from each party. On receipt of such application and accompaniments the Committee shall appoint a Special Sub-Committee of three members in accordance with No. 6 of the new Rules for first registrations, whose award shall be final. Such awards shall be recorded by the Association and given effect to in the Association's Register.

(C)—In arbitrations, as to exclusive or prior right of user in any trade-mark for any or all class or classes of goods, the following considerations shall be considered decisive in the degrees indicated by the number of points hereunder assigned to each:—

(*a*) Specific DECLARATION at time of registration of the class or classes of goods to which the trade-mark was to be applied ...	5 POINTS.
(*b*) Clear INDICATION by words, letters or figures on the trade-mark of the class or classes of goods to which it was to be applied	3 POINTS.
(*c*) PRIORITY of registration without either declaration or indication of the class or classes of goods to which the trade-mark was to be applied...	2 POINTS.

Provided always that if the member who has registered a trade-mark $\frac{\text{and}}{\text{or}}$ who can prove declaration $\frac{\text{and}}{\text{or}}$ indication of the class or classes of goods to which it was to be applied, can prove also that he has, in fact, habitually applied the said trade-mark to any or all of the said class or classes of goods, the points above assigned to such declaration or to such indication, as the case may be, shall be squared in so far as relates to the class or classes of goods to which the trade-mark has, in fact, been habitually applied.

Example: Thus a member who first registered a trade-mark, whose trade-mark fulfilled the conditions of indication as above defined, who further, at the time of registration, specifically declared the class or classes of goods to which it was to be applied, and who proves that he has, in fact, habitually applied the said trade-mark to the said class or classes of goods or to any of them, would be entitled to the following points in respect of each and all of the said condition so far as relates to the class or classes of goods to which the trade-mark has, in fact, been habitually applied:—

(*a*) DECLARATION,	5 POINTS	squared in consideration of use	25 POINTS.
(*b*) INDICATION,	3 ,,	,, ,, ,, ,,	9 ,,
(*c*) PRIORITY,	2 ,,	,, ,, ,, ,,	4 ,,
		Total ...	38 POINTS.

(△)—If there shall be on the Association's Register two trade-marks, either of which might reasonably be held to be a colourable imitation of the other, but registration of which was in each case accompanied by specific declaration of the class or classes of goods to which it was to be applied, or both of which trade-marks bear words, letters or figures clearly indicating applicability to any or all the same class or classes of goods, or either of which trade-marks bears words, letters or figures clearly indicating its applicability to any or all the class or classes of goods for which the other trade-mark was specifically declared at time of registration or to which such other trade-mark has, in fact, been habitually applied, the fact of their so standing on the register shall be held to show that neither trade-mark was at time of primary registration considered to be a colourable imitation of the other. And if the owner of one of the said trade-marks shall, on the ground of colourable imitation, oppose an application for the registration of the other of the said trade-marks for use on any or all the class or classes of goods not declared or indicated at time of original registration, such opposition shall be disallowed, unless both parties agree under Rule *B* to refer the matter to arbitration.

RULES FOR THE ELECTION OF A REPRESENTATIVE OF THE ASSOCIATION ON THE BOARD OF THE VICTORIA TECHNICAL INSTITUTE.

1. Any member of the Association shall be eligible as Representative of the Association on the Board of the Victoria Jubilee Technical Institute.

2. The period of office of any elected Representative of the Association on the Board of the said Institute shall be one of three years. At the end of such period he shall retire but may be re-elected.

3. The appointment of the Association's Representative shall be made at a General Meeting of the Association and such Representative shall *ex-officio* be a member of the Committee of the Association.

4. In the event of the disqualification of the Association's Representative under Section 9 or 10 of the Rules and Regulations of the said Institute, or in the event of the decease or resignation of such Representative, or in event of his ceasing for any reason to be a member of the Association, the Committee shall appoint a successor, who shall hold office up to that date at which the Representative whom he succeeds would, under Rule 2, have retired.

5. In the event of the absence of the Association's Representative from three or more consecutive meetings of the Board, or in the event of the Association's Representative applying for leave of absence, the Committee may, if they think fit and with the consent of the Board of the said Institute, appoint a substitute, who shall hold office until the Representative whom he replaces resumes attendance or up to that date at which the Representative whom he replaces would, under Rule 2, have retired.

RULES FOR THE ELECTION OF A REPRESENTATIVE OF THE BOMBAY MILLOWNERS' ASSOCIATION TO SERVE ON THE BOARD OF TRUSTEES UNDER THE PROVISIONS OF THE CITY OF BOMBAY IMPROVEMENT ACT, 1898.

(*Adopted at the General Meeting of Members held on 22nd September* 1898.)

1. Candidates shall be nominated in writing signed by one proposer and one seconder, who must be both members of the Association, and the nomination papers must be sent in to the Secretary ten clear days before the day fixed for the election.

2. The Secretary of the Association shall circulate the names of the applicants four clear days before the election.

3. The Committee shall appoint two days, which shall be duly advertised, upon which the balloting shall take place. The ballot-box shall be open from 10 A.M. till 6 P.M. on each day.

4. Votes may be given either in person or through any one duly authorised by a member of the Association, each subscribing member being entitled to one vote only.

5. The Committee shall appoint two scrutineers who, at 6 P.M. on the second day of the ballot, shall open the box and declare the result.

6. The candidate who has the largest number of votes shall be declared duly elected.

7. In the event of an equality of votes preventing the due election of any of the candidates, the members of the Association shall vote afresh in the manner above laid down, the voting in such case to be confined to the candidates who have secured an equal number of votes.

8. In the event of a casual vacancy the above course shall be followed in the appointment of a substitute.

9. In the event of the temporary absence of a Representative of the Association on the Board of Trustees necessitating the appointment of a substitute under Section 13 (2), such appointment shall be made by a majority of the votes of the Committee of the Association at a meeting called for the purpose.

REPORT

OF THE COMMITTEE OF THE

BOMBAY MILLOWNERS' ASSOCIATION.

For the period from 1st January to 31st December 1903.

TRADE-MARKS REGISTRATION WITH THE ASSOCIATION.

(See *Association's Report for* 1902, *page* 50.)

The establishment of the Association's New Register of Trade-marks, under the Rules adopted at the Annual General Meeting of the 24th June 1903, has been one of the most important and arduous parts of the year's proceedings. It will be remembered that the lateness of the date at which that Meeting was held was due to the necessity for taking Counsel's opinion upon certain questions that arose in connection with these rules; and it is satisfactory to be able to report that on the whole they have so far worked with very little friction and trouble.

From time to time questions have arisen which have demanded the careful consideration of the Sub-Committee appointed under Rule C, and of the General Committee on receiving the report of that Sub-Committee. These points as decided are now carefully recorded; and it is hoped that in time a complete code or rulings, complementary of the actual Rules, will be formed.

It had been noted that in the old Register there were many Trade-marks whose owners had registered them in a great variety of colours and sizes; and when members began to send in their tickets for Secondary Registration (that is, for inclusion in the new Register) it was found that in certain cases the same procedure was followed. It was evident that the design is the essential part of a Trade-mark, and separate registration of such Trade-mark in various colours and sizes would appear to be not only unnecessary, but positively undesirable as implying a presumption that the right of a member in a certain design, printed in a particular colour or with particular numbers upon it, is dependent on his having registered it with these particular variations. The Secretary therefore placed the matter before the Committee, who, at the meeting held in September 1903, directed that the following circular be issued to members :—

> **"Members are informed that when sending in Trade-marks or Tickets for Registration, under the new Rules, it is unnecessary that such variations of a particular design as consist only in variation of size, colour or number of yarn should be separately registered. The design is regarded as the essential feature of a Trade-mark or Ticket; and a member, having registered a design for use on a particular class or classes of goods, is entitled to use it for that purpose in any size or colour he may please. Members using a particular design with several variations of size, colour or number of Counts are not expected therefore to register all these variations separately."**

Unfortunately it does not appear that the Ruling in question has been fully borne in mind by all members, some of whom continue to send in such variations.

In the month of October a somewhat difficult question arose in connection with the right of user in the Trade-marks of a mill which had formerly been a member of the Association, but **whose membership has lapsed,** which thereafter changed hands, whose name had been changed, and which then again became a member under a new name and new owner who claimed the right to use the old Trade-marks of the mill with the new name upon them.

In this connection a further important question arose as to whether a mill whose membership had lapsed should on reviving its membership have in effect any right to object to such tickets resembling its own as might have been **registered in the interval.**

These matters were first considered by the advisory Sub-Committee, appointed under Rule C. In respect of the last question the advisory Sub-Committee were of opinion that the Trade-marks of a mill whose membership has so lapsed must on the revival of its membership undergo the procedure prescribed for primary registration, in other words that such Trade-marks must be treated as new Trade-marks. The reason for this view was that, during the time when the membership of such mill was in abeyance it might well happen that another member might unwittingly introduce a Trade-mark resembling one of those belonging to the Company whose membership had lapsed, and that it would be a hardship to such other member to have the re-joining member resume use of a Trade-mark likely to be confused with that which he had so introduced. The General Committee, however, took a different view on this point, and at the meeting of Committee held on the 6th November the following Rulings were adopted :—

(1) That when a **mill changes hands,** the purchaser, except when and in so far as otherwise expressly agreed between vendor and purchaser, acquires such rights of user as appertain to the various Trade-marks used by the mill.

(2) That a **change in the name** of a mill does not effect any of those rights.

(3) That the introduction of the **new name of the mill as a feature** of any such Trade-marks does not affect any of those rights.

(4) That if membership of the Association in respect of a mill or mills shall have terminated, whether through failure to pay dues or otherwise, and if on the **revival of membership** in respect of such mill or mills, whether by the original owners or otherwise, and whether under the original name or otherwise, it shall be found that during the interval when the membership was in abeyance there have been registered with the Association a Trade-mark or Trade-marks alleged by the person reviving the membership to be a colourable imitation of a Trade-mark or Trade-marks previously registered with the Association by the mill or mills in respect of which membership

is revived, then the owner or agent of such mill or mills shall have the **right to protest at any time within fourteen days** of the revival of membership against the registration already made of the Trade-mark or Trade-marks in question, and if necessary to demand arbitration either under Rule 4 or under Rule 7; and the award in such cases shall be binding on the parties and shall be given effect to in the Register of the Association.

This last ruling being of very considerable importance it was directed that it should be brought up for **confirmation as a Rule at the next Annual General Meeting.** This will accordingly form one of the items on the Agenda of the Meeting at which this Report will be submitted for adoption, and will, if approved, be added to the rules for Secondary Registration.

Another matter that will fall to be finally decided at the Annual General Meeting is the position of a **newly joining member** in respect of those Trade-marks which he may have been using for years but which are not on the Register of the Association. Would such a newly joining member, who had signed the Form of Adherence, agreeing to submit to arbitration all disputes with members, be obliged to submit his old Trade-marks to the possible objection of older members who claim priority for their Trade-marks on the simple ground that they are on the Register, and to proceed to arbitration in which the award would presumably be made mainly on the same grounds? There is no doubt that as the rules at present stand this is so; and the effect is that certain new members decline to consummate their membership by signing the Form of Adherence in question. It is clear, however, that there is here a flaw in the rules which not only will prevent new members from joining, but is wrong in principle.

The Association fully recognise that registration of a Trade-mark with the Association does not *per se* confer or constitute any right of user not otherwise existent, but has effect only as presumptive evidence of the existence of such a right.

They also recognise that the absence from the register of any particular Trade-mark used by a member cannot, except in the sense above stated, affect such right at law as may be possessed by that member as towards some one who is not a member or conversely the right of a non-member as towards a member.

But, as between members of the Association, it is agreed that priority of registration by one member with consent of the other members establishes a right of user (See Rule 3); and Rule 4, *et seq.*, provide for resort to arbitration in event of a dispute.

But in the rules there is nothing about a **non-member who, already possessing rights** which he is not prepared to submit to any arbitration, **desires to become a member.** Under the Rules as now drawn he would, if he refused to go to arbitration, be in exactly the same position as any other member who deliberately broke the rules he had agreed to observe.

On the one hand, it would be useless and is not desired that the Association should pretend to create or limit any absolute rights at law which are

constituted by factors entirely outside its control. And it is essential to the utility of the Register that the rights therein recorded should in all respect be as nearly as possible identical with the real rights at law. For this reason it is as little to the advantage of the Association as of a newly joining member that the Rules should be such as to exclude from the Register those trade-marks which he has habitually used, perhaps for many years, and which he is entitled in law to use again.

On the other hand, it is undesirable that a manufacturer should at the time of his first becoming a member have power to put on the Register, without the scrutiny of the other members, Trade-marks to which he might or might not be able to make good a claim at law.

To the Committee there appeared to be three courses open—

(1) To impose on joining members a strict compliance with **the Rules as they stand.** This would prevent many persons from joining, and it was at first feared that it might lead others, who are already members in respect of some of their mills, to resign membership rather than sign a Form of Adherence. But since, under the new Rules the **Company itself** and not the Agent of the Company is **the member,** an Agent managing more than one Company is obliged to sign a separate Form of Adherence in respect of each Company, and the form when so signed relates only to the particular Company named in it.

(2) To make a new rule whereby a member joining under the circumstances stated might **before signature of the Form of Adherence** send in his Trade-marks with proof of their having been habitually used for a prescribed period ; and might then sign and join, on his being informed that the Committee and those members who might otherwise have been disposed to object to his Trade-marks were satisfied with the proof and recognised his right of user. But if an old member maintained his objection and the new member declined to go to arbitration, a deadlock would still exist. And in any case the responsibility thrown on the Committees as regards the proof of habitual use would be very great.

(3) To make a new rule under which a new member might be permitted to sign **a modified Form of Adherence** not binding him to go to arbitration in respect of any such of his old Trade-marks sent in at the time of his joining as might be objected to by another member. He should be required to send in at time of joining all those old Trade-marks in respect of which he claimed such exemption. These Trade-marks would be circulated in accordance with Rule 2. Such as were not challenged would be put on the ordinary register. Such as were challenged would be put on **a special register of Trade-marks in**

suspense, and in respect of these he should not be required to go to arbitration. The Committee understand that it would then be incumbent on the objector to take immediate steps at law if he desired to make his objection good. If no such action were taken and intimated within a stated period the registration of the Trade-mark in question would become absolute.

The Committee being of opinion that the best solution of the difficulty would be found in the third and last of these courses addressed their Solicitors on the subject on the 2nd February 1904.

SECONDARY REGISTRATION.

Trade-marks must be identical with those on the old Register.

Some members send in for secondary registration trade-marks which differ in a greater or less degree from those on the old Register. Some of the differences are so slight that no objection to the trade-mark in its new form would probably be made on account of them by members. Others, though involving details only, have the effect of modifying the general appearance of the trade-marks as a whole. A third class of variation is that in which a combination is effected of two or more marks or features of marks separately registered by the same member. Several cases of the kind having occurred, the matter was referred to the Advisory Sub-Committee appointed under Rule C.

Having regard to the extreme difficulty of ruling what variations should be allowed in trade-marks for Secondary Registration and to the improbability that any objection would be taken to the registration of a trade-mark differing only in insignificant detail from one already standing on the old Register in the name of the applicant for registration, the Advisory Sub-Committee ruled :—

(*a*) That no trade-mark should be admissible to Secondary Registration unless it is **identical in all respects** with the corresponding trade-mark on the old Register, and that members desiring Secondary Registration should be required to send in for such registration trade-marks identical with those on the old Register.

(*b*) That trade-marks differing in any way from those on the old Register must be subject to the Rules for Primary Registration.

(Failure to Comply with Rule B as to Declaration of Class or Class of Goods.)

The attention of members is again directed to the fact that, under Rule B, it is necessary that any member sending in a trade-mark for Secondary Registration should attach to it a statement showing—

(*a*) The class or classes of goods, if any, to which, at time of primary registration, it was specifically declared that the ticket was to be applied.

(*b*) The class or classes of goods, if any, to which the applicability of the trade-mark was clearly indicated by words, letters, $\frac{\text{and}}{\text{or}}$ figures forming a part of or an adjunct to the design.

(*c*) The class or classes of goods, if any, to which the trade-mark has in fact been habitually applied by the applicant for registration.

(*d*) The class or classes of goods, to which the applicant desires to apply the trade-mark.

This rule has been ignored by some members with the effect that the registration of their trade-marks has been retarded and invested with a good deal of inconvenience and delay. Attention is drawn to the matter in the hope of obviating such trouble.

TRADE-MARKS REGISTER.

SUBJECT-INDEX.

Formerly registration of a trade-mark with the Association consisted merely in its insertion in one of the albums kept for that purpose. In these albums the trade-marks have been classified only under the names of the respective mills. No notice was taken of the nature of any of the trade-marks, and if a member desired to find a trade-mark of a particular kind it was necessary that he should scrutinize every page. This demanded time and involved such wear and tear of the registers as caused serious deterioration.

There has therefore been established, in connexion with the registration of trade-marks under the new rules, a subject-index by which a member desiring to inspect tickets of a particular kind will be able to ascertain the pages on which they are to be found.

This subject-index is established only for the convenience of members. It is sometimes difficult to say exactly what a particular trade-mark is intended to represent. All reasonable care will be used in describing and indexing the trade-marks. *But the Association accepts no responsibility of any kind for any error or omission in the Index itself or for any error or loss into which a member may be led by such a defect.*

The constitution of the Index is as follows :—

A. Alphabetical List of Objects Depicted, showing—

(*a*) Specification of every trade-mark on which a particular object is depicted.

(*b*) Dates on which these trade-marks were respectively registered.

(*c*) Pages of register on which copies of said trade-marks are to be found.

BOMBAY IMPROVEMENT TRUST.

(Representation of Association.)

On 9th February 1903 the Secretary of the Bombay Improvement Trust informed the Association that the term of office of Mr. Sassoon [redacted] David to represent the Association on the Board of Trustees would expire on [redacted]t March 1903. The Committee made the usual arrangements for a fresh electio[redacted]nd the balloting, which took place on the 4th and 5th March 1903, resulted in [redacted] re-election of Mr. David.

GOVERNMENT STATISTICS.

MONTHLY RETURN OF COTTON SPINNING AND WEAVING MILLS IN INDIA.

(Bombay Island and Ahmedabad to be shown separately.)

In the month of June it was suggested to the Committee that Government might be asked to give, in the Monthly Return relating to the Cotton Mills in India, separate figures not only for the Bombay Presidency but also for the Island of Bombay and for Ahmedabad. The usefulness of the Return in the form observed up to that time was expressly admitted; but it was represented that, since by far the largest number of Mills were situated in Bombay and at Ahmedabad, it would be a great convenience to Millowners if the figures for these two cities could be shown separately.

In favour of the proposal and as indicating that the change would not necessitate the collection of additional statistics, allusion was made to the fact that the Collectors of Bombay and of Ahmedabad, as was understood, already furnished separate sets of figures to the Director-General of Statistics.

The Director-General of Statistics responded to the proposal at once and informed the Association that the matter was under consideration.

On the 4th of August the Officiating Director-General of Statistics again addressed the Committee and forwarded a copy of the Return in question showing the figures for Bombay and for Ahmedabad separately.

At first some difficulty was found in constituting the Ahmedabad figures for the previous years; but this was subsequently remedied and the usefulness of the Return has been greatly enhanced.

The cordial thanks of the Committee were conveyed to the Director-General of Statistics for his ready compliance with the suggestion of the Committee. (*Appendix* **B.**)

DISCREPANCY IN COTTON STATISTICS.

The Secretary to the Association last year pointed out with some fulness that the Government estimate of the cotton crop-yield fell greatly short of the sum of exports and consumption. The Government of India has accordingly revised the estimates for past years ; and in the last issue of the Annual Blue-book called *Area and Yield* these estimates have been greatly modified in the sense indicated by the Secretary. The following extract from the Introductory Note to the publication in question relates to this revision :—

"The estimates are not made for the whole of India and are necessarily, in the most favourable circumstances, only approximations to the truth. The necessary data for statistics of crop outturns are (1) the area sown, and (2) the average yield per acre. The former may be either measured or estimated, but the latter must always be conjectural, and as it is necessary both to adopt a normal yield for large areas often differing much in soil and cultivation, and to determine the percentage of the normal yield representative of the yield of each year, there must necessarily be an element of uncertainty in the result. Recent enquiries into the statistics of the cotton crop for past years show that in some of the provinces, where agricultural records are very complete and the areas sown have accordingly been determined with great exactness, the estimates of the outturn, when compared with the known exports and consumption, are the most defective. This is caused partly by the adoption of too low a standard but chiefly by the character of the seasons, both in good and bad years, being unduly depreciated. The figures have therefore been revised, as far as possible, for the enquiry is not yet complete, and to enable comparisons to be made the estimates of previous years have also been corrected."

Reference to page 38 of the Report for last year will show that the discrepancy on a ten years' average amounted to some 7¼ lakhs of bales per annum or about 36·2 per cent. of the estimated yield. The revision of the Government statistics has resulted in a very considerable increase in the estimates of yield and in a corresponding reduction in the discrepancy between them and the sum of exports and consumption. But, as will be seen from the Table given below, there still remains a discrepancy of some five lakhs of bales per annum, representing about 21·5 per cent. of the estimated yield. The Director-General of Statistics, in the passage quoted above, appears to fall into the error of regarding the consumption as determinable with the same accuracy as is possible in respect of exportation ; and it was very fully shown in last year's Report that this is not so. But the probable error in the estimate of consumption can scarcely amount to anything like five lakhs of bales per annum ; and it is to be hoped that the continued investigations that are being made by Government may further reduce the discrepancy that has been pointed out. It is also to be **hoped that Millowners will assist** Government and the Association in the analysis of these questions by making their returns of consumption as accurate as possible. With reference to the following Table, it must be pointed out that the ten years' yield is estimated by Government in bales of 400 lbs., while in the other data the bale is taken as one of 392 lbs. A conversion of the Government figures into bales of 392 lbs. has the effect of still further reducing the discrepancy under discussion to one of about 4½ lakhs of bales per annum ;—

ALL INDIA.

Years.	Yield. (Official year) Bales of 400 lbs.	Export. (Official year) Cwts.	Mill Consumption. (year ending 30th June) Bales of 392 lbs.
	(Revised)		
1893-94	2,480,692	4,788,888	1,222,508
1894-95	2,116,143	3,384,697	1,341,714
1895-96	2,497,977	5,248,428	1,409,318
1896-97	1,991,207	5,216,023	1,300,936
1897-98	2,382,726	3,722,526	1,481,328
1898-99	2,807,343	5,411,012	1,675,190
1899-1900	956,540	4,373,470	1,453,352
1900-01	2,730,231	3,575,703	1,351,740
1901-02	2,645,455	5,700,014	1,765,038
1902-03	2,687,813	6,044,806	1,739,340
*	23,296,127	47,465,567 or 13,561,590 Bales.	14,740,464 13,561,590
Total Export and Mill Consumption			28,302,054
Deduct—Yield			23,296,127
10 years' Excess of Alleged Consumption over Production ...			5,005,927 = 21·5 of yield

* or at 392 lbs. per Bale = 2,37,71,533.

PROGRESS OF THE MILL INDUSTRY.

The following figures are taken from the annual statement published by the Association, and show, for the last ten years, the position of the Mill Industry in India on the 30th June, also Bombay's share in that industry, and the increase or decline, as the case may be, in the number of spindles, looms, &c.

It is necessary to draw the attention of millowners to the great discrepancies which were, in last year's Report, shown to exist between the **returns of consumption** made by the various mills and the balance of arrivals after deducting the known quantity of exports. It is to be feared that many members who are not intimately concerned in the management of the Association do not realise the value of correct returns if the Committee are to be able to act effectively in the interests of the Industry ; and the Committee take this opportunity of begging that when the next returns, as at 30th June 1904, are sent in, **Agents and Owners will give this matter their personal attention** and see that the statistics are prepared with all possible exactness.

Another matter that requires attention is the preparation of the return showing the **average number of spindles or looms worked each day** throughout the year. It is only by analysis of this return, when carefully prepared, that it is possible to ascertain certain facts about the Indian Mill Industry which it is of the utmost importance to members to know. It is found that many members return as the average number of spindles worked per diem the total number of spindles erected in the mill. This, of course, could only be correct if every spindle in the mill had been working steadily on every day throughout the year ; whereas it is a matter of common knowledge that some of the mills so returning their average have been stopped at various times. The correct average

is obtainable by **multiplying the number of spindles worked by the number of days on which they were so worked and dividing by the total number of working days in the year.**

ALL INDIA.

Years ending 30th June.	Number of Mills.	Number of Spindles.	Number of Looms.	Average No. of Hands employed daily.	Approximate Quantity of Cotton consumed.	
					Cwts.	Bales of 392 lbs.
1894...	142	3,649,736	31,154	130,461	4,278,778	1,222,508
1895...	148	3,809,929	35,338	138,669	4,695,999	1,341,714
1896...	155	3,932,946	37,270	145,432	4,932,613	1,409,318
1897...	173	4,065,618	37,584	144.335	4,553,276	1,300,936
1898...	185	4,259,720	38,013	148,964	5,184,648	1,481,328
1899...	188	4,728,333	39,069	162,108	5,863,165	1,675,190
1900...	193	4,945,783	40,124	161,189	5,086,732	1,453,352
1901...	193	5,006,936	41,180	172,883	4,731,090	1,351,740
1902...	192	5,006.965	42,584	181,031	6,177,633	1,765,038
1903...	192	5,043,297	44,093	181,399	6,087,690	1,739,340

BOMBAY ISLAND.

Years ending 30th June.	Number of Mills.	Number of Spindles.	Number of Looms.	Average No. of Hands employed daily.	Approximate Quantity of Cotton consumed.	
					Cwts.	Bales of 392 lbs.
1894...	69	2,027,374	18,265	70,553	2,557,296	730,656
1895...	69	2,123,892	20,217	75,740	2,853,879	815,394
1896...	71	2,186,323	21,335	78,455	2,973,873	849,678
1897...	75	2,187,425	21,287	69,530	2,459,646	702,756
1898...	82	2,226,982	21,379	70,728	2,860,648	817,328
1899 ..	82	2,410,861	22,209	77,169	3,327,800	950,800
1900...	82	2,536,891	22,215	72,914	2,606,800	744,800
1901...	81	2,571,092	22,414	82,162	2,435,153	695,758
1902...	80	2,523,769	22,845	86,122	3,455,823	987,378
1903...	80	2,533,382	23,125	86,913	3,451,798	986,228

It will be seen that the number of mills is unchanged either in all India or in the Island of Bombay. Bombay represents 41·6 per cent. of the mills, 50·4 per cent. of the spindles, and about 52·44 of the looms. But Bombay does not appear to be keeping pace with the rest of India in the matter of additions to plant. In spindles she has only added 9,613 or about 0·38 per cent. in the past year, while the rest of India has added 26,719 or about 1·07 per cent. of its total. In looms again, Bombay has only added 280 in the course of the year, this being a little over 1·2 per cent. on the last year's figures; while the rest of India has added 1,228 looms or something over 6·2 per cent. Taking these facts in conjunction with the inability of Bombay to keep in touch with the Chinese cloth market, it seems evident that there is a certain want of enterprise.

It would appear moreover that the increase in the **number of hands** employed in Bombay mills, which was noticed last year, has continued though in a less marked degree. Bombay shows a further increase of nearly 800 in the number of hands employed; and, as all India showed an increase of only 370, it is evident that in the mills outside Bombay the total roll was reduced by upwards of 420.

In the case of mills outside Bombay the reduction in question is accompanied by one of 85,918 cwts. or 3·25 per cent. in the **consumption of cotton**; but in Bombay the increase in the labour employed stands in contrast with a fall of 4,025 cwts. or 0·1 per cent. in the quantity of cotton used. It may be remembered, however, that last year there was an equally remarkable rise in Bombay's consumption of cotton, side by side with a very moderate increase

in her muster-roll. On the period of twenty-four months we find that Bombay, with an addition of 4,751, or say, 5·8 per cent. to her muster-roll, increased her cotton consumption by about 41·74 per cent.; while the rest of India with an addition of about 4·1 per cent. to her muster-roll, increased her consumption only 15 per cent. If the figures in respect of cotton consumption could be accepted with full confidence, these facts would give grounds for satisfaction.

COMPARISON OF COTTON CONSUMPTION WITH YARN PRODUCTION.

It is interesting to test the correctness of the returns of consumption made by Millowners by comparison with the definitely ascertainable figures for yarn production. In the following Table the consumption of cotton is taken from the returns of the individual mills. The production of yarn is taken from the Blue Book entitled *Financial and Commercial Statistics*, and these figures are converted from pounds to hundredweights for purposes of comparison. The production statistics are available only for the last eight years since the passing of the Cotton Duties Act. The consumption statistics, both in this Table and in that preceding it, are for the "season year" ending 30th June; while those for production relate to the "official year" ending 30th April. For this reason it is expedient to deal only with the averages for the eight years' period.

The conversion of cotton into yarn involves a loss of weight through **wastage** of cotton. This loss is supposed to be **about 16 per cent.** on the whole weight of cotton; and in the following calculations a deduction of that amount is accordingly made on the average consumption in order to ascertain what weight of yarn ought theoretically to be expected from the quantity of cotton returned as used in the Indian mills. The production of yarn in the Hyderabad Assigned Districts, Indore, Mysore, Baroda, Nandgaon, and Bhavnagar have been included in the figures; and still it will be seen that, allowing for a 16 per cent. wastage, the alleged mill consumption of cotton in all India ought to have given in each year some 181,814 hundredweights of yarn more than was actually produced. Restoring to this quantity the 16 per cent. already deducted there are 210,904 cwts. or 60,258 bales of cotton unaccounted for. It will be interesting if it is eventually found that this is approximately the extent of the Millowners' contribution to the net discrepancy of 4½ lakhs of bales discussed in the foregoing section of this Report.

Comparison of Cotton Consumption and Yarn Production. Eight years—1895-96 to 1902-03.

ALL INDIA.

12 months' period ending 30th June.	Cotton Consumption. Cwts.	Yarn Production. Cwts.
1896	4,932,613	3,860,287
1897	4,553,276	3,778,436
1898	5,184,648	4,130,320
1899	5,863,165	4,574,867
1900	5,086,732	4,587,708
1901	4,731,090	3,151,563
1902	6,177,633	5,115,519
1903	6,087,690	5,144,951
Total of 8 years...Cwts.	42,616,847	34,343,651
Annual Average ... Cwts.	5,327,106	4,292,956
Deduct—16 per cent. wastage	852,336	
Difference ... Cwts.		181,814
	Cwts. 4,474,770	Cwts. 4,474,770

The following is an examination of the same question so far as relates to the Island of Bombay alone. Unfortunately, as was mentioned last year, the figures giving the production of yarn in Bombay alone in the **year ended 30th June 1900 are not obtainable.** The corresponding figures in the other columns, though noted in *italics*, are therefore ignored in the calculations and the average struck on the six years that remain.

BOMBAY ISLAND.

Year ending 30th June.	Hands Employed.	Yarn produced. Cwt.	COTTON. Mill Consumption. Cwt.	COTTON. Exports. Cwt.	COTTON. Arrivals. Cwt.	Difference between Consumption and Production.
						Per cent.
1897	69,530	2,175,000	2.459,646	3,528,437	5,645,113	11·5
1898	70,728	2,308,036	2,860,648	2,917,068	6,055,890	.....
1899	77,169	2,659,821	3,327,800	3,843,423	7,116,133	20·07
1900	*72,914*	.....	*2,606,800*	*1,966,951*	*3,459,925*	.....
1901	82,162	1,695,490	2,435,153	3,360,875	6,638,588	30·37
1902	86,122	2,988,619	3,455,823	4,401,071	7,498,708	13·5
1903	86,913	2,937,314	3,451,798	4,446,865	8,589,010	14·9
Total	472,624	14,764,280	17,990,868	22,497,739	41,543,442	17·4
6 years' average	78,770	2,460,713	2,998,478	3,749,623	6,923,907	...

Taking the average mill consumption as returned, *i.e.*, 2,998,478 cwts. and deducting therefrom 16 per cent. or 479,756 cwts., loss by wastage in manufacture, we find that the weight of yarn to be expected from the alleged consumption of cotton in Bombay Island was 2,518,722 cwts. per annum, whereas only 2,460,713 cwts. were actually produced. The difference here is 58,009 cwts., a quantity which looks large enough by itself, but which in reality represents something less than 2 per cent. on the alleged consumption.

It will be noticed that in the above table **a column has this year been added** showing the percentage of alleged consumption represented by the difference between consumption and production. When the percentages there shown are compared with the theoretical 16 per cent. wastage in manufacture, it is evident that there is something very far wrong about the figures for 1897, which give a wastage of only 11·5 per cent., and still more about those for 1901 which show an apparent wastage of 30·37 per cent. No great importance can therefore be attached to a six-years' average into which such inconstant factors enter ; but it is hoped that by annual examination of this point millowners may be induced to aim more strenuously at accuracy in their returns.

For the same reason no satisfactory conclusions can be drawn from the **comparison of the figures of consumption and production with the number of hands employed.** For instance, while in 1901 it would appear that every hand took 29·64 cwts. of cotton to produce only 20·63 cwts. of yarn, in 1902 every hand apparently produced 34·7 cwts. of yarn from 40·13 cwts. of cotton, and in 1903 produced 33·8 cwts. of yarn from 39·71 cwts. of cotton. And it must be borne in mind that the foregoing calculations of capitation production of yarn are to an uncertain extent vitiated by the inclusion of the number of hands really engaged in weaving.

SHIPMENTS OF YARN.*

It is satisfactory to have to notice, in the appended table, **a record** exportation of Indian yarns to the Further East and the attainment for the first time of a total exceeding six lakhs of bales. The conditions in China were of course not altogether favourable; and it need scarcely be said that the fluctuations in the value of silver, which are recorded in another table, have rendered dealing with the Eastern markets troublesome and risky. More recently, the high prices ruling for cotton have made profitable working difficult, and in many cases quite impossible. But, as was stated in the Report for 1902, the market in China was at that time fairly bare, and, in the absence of any grave disturbances, the demand for Indian yarns developed satisfactorily.

Exports of Country-made Yarn from Bombay to China and Japan.

PERIOD.	To China (Bales, 400 lbs. each).	To Japan (Bales, 400 lbs. each).	Total Bales.
From 1st January to 31st December 1877	28,516	142	28,658
Do. do. 1878	45,933	1,745	47,678
Do. do. 1879	45,530	4,842	50,372
Do. do. 1880	63,194	4,527	67,721
Do. do. 1881	61,783	7,378	69,161
Do. do. 1882	81,434	9,854	91,288
Do. do. 1883	94,982	17,421	112,403
Do. do. 1884	127,318	13,846	141,164
Do. do. 1885	154,517	19,020	173,537
Do. do. 1886	199,407	20,543	219,950
Do. do. 1887	205,158	39,730	244,888
Do. do. 1888	234,071	52,697	286,768
Do. do. 1889	254,697	62,220	316,917
Do. do. 1890	325,060	37,722	362,782
Do. do. 1891	365,038	10,939	375,977
Do. do. 1892	385,771	21,445	407,216
Do. do. 1893	297,572	14,198	311,770
Do. do. 1894	338,703	10,743	349,446
Do. do. 1895	374,119	2,515	376,634
Do. do. 1896	471,023	2,467	473,490
Do. do. 1897	361,221	645	361,866
Do. do. 1898	437,645	475	438,120
Do. do. 1899	579,619	250	579,869
Do. do. 1900	253,331	100	253,431
Do. do. 1901	536,195	.....	536,195
Do. do. 1902	555,487	.....	555,487
Do. do. 1903	604,044	.....	604,044

Trade with Japan in Indian yarns was still impossible; and the shrinkage of about 40 per cent. in Japan's imports of British goods shows that the conditions there affect others as well as India. It remains to be seen whether a state of war, which in China so greatly injured commerce, may in the case of Japan afford an opportunity to Indian millowners. Japan was extraordinarily successful in the opening naval actions, and might be taken as having established for some time to come an effective mastery of the sea, so that her steamers might ply in fair security and possibly even carry her products to China. But it is most improbable that such a war as she is now engaged in can fail to embarrass her industries and restrict her output, while it is perfectly possible that this industrial disturbance may be such as to oblige her to avail herself of her command of the sea, and to have recourse to India for yarns or cloths.

* For note on development of yarn trade with the Levant, see page 49.

Exports of Country-made Piece-goods from Bombay to China and Japan.

PERIOD.	CHINA.		JAPAN.		TOTAL.	
	Packages.	Yards.	Packages.	Yards.	Packages.	Yards.
From 1st Jan. to 31st Dec. 1877...	10	14,400	...	.....	10	14,400
Do do. 1878...	1,206	1,499,334	58	113,528	1,264	1,612,862
Do. do. 1879...	296	365,640	5	8,400	301	374,040
Do. do. 1880...	1,553	1,890,685	110	132,000	1,663	2,022,685
Do. do. 1881...	144	168,139	2	5,250	146	173,389
Do. do. 1882...	573	713,237	20	36,714	593	749,951
Do. do. 1883...	1,875	2,188,770	452	565,953	2,237	2,754,723
Do. do. 1884...	1,595	1,770,662	16	25,187	1,611	1,795,849
Do. do. 1885...	2,303	3,712,273	6	5,376	2,309	3,717,649
Do. do. 1886...	2,302	2,988,890	...	.....	2,302	2,388,890
Do. do. 1887...	1,963	2,584,680	3	4,560	1,966	2,589,240
Do. do. 1888...	11,320	15,751,688	96	140,321	11,416	15,892,009
Do. do. 1889...	1,302	1,985,997	26	31,200	1,328	2,017,197
Do. do. 1890...	3,148	3,660,574	21	23,800	3,169	3,684,374
Do. do. 1891...	4,564	6,102,250	...	.....	4,564	6,102,250
Do. do. 1892 ..	7,416	9,984,335	...	.....	7,416	9,984,335
Do. do. 1893...	3,598	4,517,445	38	57,312	3,636	4,574,757
Do. do. 1894...	4,949	6,068,702	...	.....	4,949	6,068,702
Do. do. 1895...	7,744	10,064,441	7	7,200	7,751	10,071,641
Do. do. 1896...	7,024	8,638,535	26	30,420	7,050	8,668,955
Do. do. 1897...	2,368	3,036,875	15	21,988	2,383	3,058,863
Do. do. 1898...	947	1,318,478	...	.....	947	1,318,478
Do. do. 1899...	3,034	3,993,348	1	1,680	3,035	3,995,028
Do. do. 1900...	1,080	1,372,980	...	.....	1,080	1,372,980
Do. do. 1901...	418	559,100	...	.....	418	559,100
Do. do. 1902...	500	569,758	...	.....	500	569,758
Do. do. 1903...	138	168,081	...	.....	138	168,081

On the other hand it will be seen from the foregoing table that the exports of country-made piece-goods from Bombay to China fell from 569,758 yards to 168,081 yards, the decline being one of 70·40 per cent. It is believed that this decline is due to no absence of demand in China, but purely to the failure of the Indian manufacturer to study the rather peculiar requirements of that market. If this be so, it is much to be regretted; for it is evident from the increased consumption of Indian yarns in that country, when taken in conjunction with a diminution of some 27 per cent. in her purchases of English yarns, that the former are found suitable for the materials most popular among the Chinese. It is clear that the failure of India to supply the finished article is inducing such a development of weaving in China as may prove a permanent bar to extensive trade in Indian cloths in that direction.

It is interesting to note that, large as is the decline of 401,677 yards recorded above, it represents only a tithe of the cloth which China has presumably woven out of the additional yarn imported from India. This was 48,557 bales of 400 lbs., equal to 19,422,800 lbs.; and, if it be taken that every pound of this yarn will make about 4 yards of cloth, we find that China has in the past year woven of this additional Indian yarn alone the equivalent of some 77,691,200 yards of Indian cloth. What Bombay has lost in the cloth trade it has, therefore, more than made good in the yarn trade; but it is evident that the China market is making itself to some extent independent of Indian cloth.

INDIAN MARKETS.

On the other hand it is believed that one of the factors that contribute most largely to the neglect of the China cloth market by the Bombay weaver is that there is a certain independence on both sides, inasmuch as the reviving Indian demand has absorbed most of the indigenous fabrics. This is borne out to some extent by study of the *Summary of Exports by all Railways* which is given among the Appendices. That return shows for the last ten years the steady **development of the up-country demand** so far as cloth is concerned, and the equally constant decrease in respect of yarns.* This, of course, is the converse of what we found in the export statistics. The increased hold gained by Indian cloth in the Indian markets is of greater importance than the conquest of any foreign market, and to a great extent accounts for the decline in the internal movement of Indian yarns. But it is to be feared that the present indifference to foreign markets which results from this happy state of things may, if indefinitely prolonged, be abandoned too late; and it will be evident to members who have noted the small advance being made by Bombay in the erection of looms that she is not quite keeping touch with her possible markets.

ECONOMIC FACTORS.

AFFECTING THE TRADE.

Last year there were for the first time introduced into the Association's Report certain tables recording the price of silver and the movement of the China exchanges (*a*) during the last ten years, (*b*) on the last day of each month in the year under Report. Corresponding tables for the past ten years and for 1903 are appended; and in view of the extraordinary prices ruling for American cotton in the last six months and the influence they have exerted on the rates for Indian cotton, **a third table recording the fluctuations in each of these markets in this year is added.**

SILVER AND THE CHINA EXCHANGES SINCE 1894.

Rates of 31st March in each year.

	Price of Silver. Per 100 Tolas. Rs. a.	Exchange on Hongkong. Rs.
1894	84 $11\frac{7}{32}$	$175\frac{1}{32}$
1895	91 12	$188\frac{11}{16}$
1896	92 $9\frac{1}{12}$	$186\frac{6}{13}$
1897	83 $9\frac{1}{3}$	$163\frac{89}{100}$
1898	71 3	$141\frac{1}{4}$
1899	73 $15\frac{15}{32}$	$149\frac{3}{25}$
1900	73 $3\frac{4}{5}$	$147\frac{4}{13}$
1901	75 $4\frac{9}{32}$	$151\frac{17}{30}$
1902	67 $1\frac{3}{7}$	$138\frac{3}{28}$
1903	59 $11\frac{1}{6}$	$119\frac{1}{2}$
1904	65 6†	$129\frac{1}{2}$ †

* A serious error having been found in the figures supplied by one of the Railways, it is impossible at the moment to include in the Report an analysis of this question, but a note on the subject will be added to the Table in the Appendices.

† Approximate.

(SILVER AND THE CHINA EXCHANGE IN 1902.)

Rates of last day in each month up to 31st January 1904.

	Price of Bar Silver in Bombay.	China Exchange.	
		Hongkong per 100 Dollars.	Shanghai per 100 Taels.
1903.	Rs. a. p.	Rs. a. p.	Rs. a. p.
27th February	56 14 0	115 8 0	158 0 0
27th March	57 6 0	118 0 0	160 0 0
24th April	61 2 0	122 8 0	166 0 0
29th May	62 14 0	122 8 0	171 8 0
25th June	61 5 0	123 8 0	171 8 0
31st July	64 9 0	127 8 0	177 0 0
28th August	66 8 0	136 8 0	189 0 0
25th September	69 8 0	135 0 0	187 0 0
30th October	70 11 0	135 0 0	186 0 0
27th November	68 8 0	128 8 0	179 8 0
30th December	65 2 0	125 8 0	175 8 0
1904.			
29th January	65 8 0	129 0 0	179 0 0

It will be noticed that whereas the price of silver in Bombay at the end of February 1902 was Rs. 64-8-0 and declined to Rs. 55-8-0 by the end of January 1903, it has in the past year recovered to Rs. 65-8-0 or one rupee higher than it was two years ago.

COTTON PRICES.

Average spot prices of Middling Upland per lb. in Liverpool and Ginned Oomrawattee and Ginned Bengal per candy in Bombay.

	Price per lb. in Liverpool for Middling Upland.	Price per Candy of 78·4 lbs. in Bombay.			
		Oomrawattee Ginned "Fine."	Delivery.	Bengal Ginned "Fine."	Delivery.
1903.	*d.*	Rs.		Rs.	
March	5·36	190¾	In March ...	184½	In March.
April	5·42	191	In April ...	185½	In April.
May	6·00	193¾	In May ...	187¾	In May.
June	6·82	200¾	Ready ...	192½	Ready.
July	6·45	199½	Do. ...	190½	Do.
August	6·77	193	Do. ...	186	Do.
September	6·40	197½	Do. ...	191	Do.
October	5·83	193¾	Do. ...	189	Do.
November	6·03	229½	In December ...	206¾	In December.
December	6·84	254½	Do. ...	231¾	Do.
1904.					
January	7·66	261	In January ...	238¾	In January.
February	*7·58	257	In February ...	237½	In February.

* Up to 23rd February.

N.B.—For approximate Ready Rates (Indian descriptions) add Rs. 2 to Forward Quotations.

IMPORTS OF BRITISH GOODS INTO CHINA AND JAPAN.

Another factor which largely affects the Indian textile trade with the Further East is of course the extent to which China derives supplies from other sources. So far as cloth is concerned, the most important of these other sources is the United Kingdom; and the shipments to China from British Ports, both in piece-goods and in yarns, showed large declines during the past year. In piece-goods the decline was one of 97,081,500 yards or 16·89 per cent.; while in yarns

the fall was one of 1,737,500 lbs., or 27·15 per cent. Unfortunately it is found impossible to obtain reliable statistics of recent date about the shipments from Japan to China; but it is thought well to reprint, at the end of this chapter, an extract from the most recent consular report on the Foreign Trade of China.

Shipments of Cotton Piece-goods and Yarns from the United Kingdom to China and Japan from the year 1877 *to* 1903.

YEARS.	PIECE-GOODS OF ALL KINDS.			YARNS.		
	To China (including Hongkong).	To Japan.	Total.	To China (including Hongkong).	To Japan.	Total.
(1st Jan. to 31st Dec.)	Yards.	Yards.	Yards.	Lbs.	Lbs.	Lbs.
1877...	36,73,29,900	2,71,50,300	39,44,80,200	1,79,62,200	1,51,05,700	3,30,67,900
1878...	34,00,97,800	4,22,32,400	38,23,30,200	1,10,58,200	2,54,09,600	3,64,67,800
1879...	46,23,03,800	6,16,17,500	52,39,21,300	1,43,43,400	2,46,07,700	3,89,51,100
1880...	44,72,71,900	6,14,64,500	50,87,36,400	1,95,14,200	2,69,11,600	4,64,25,800
1881...	52,38,52,300	6,33,25,100	58,71,77,400	1,91,49,400	2,83,29,800	4,74,79,200
1882...	40,19,58,300	5,29,90,500	45,49,48,800	1,52,26,700	1,91,44,200	3,43,70,900
1883...	37,06,59,200	4,50,06,000	41,56,65,800	1,33,70,700	2,01,48,500	3,55,19,200
1884...	39,45,83,600	4,53,54,200	43,99,37,800	1,57,24,300	2,31,34,800	3,88,56,100
1885...	52,39,27,000	4,54,12,400	56,93,39,400	2,03,73,900	1,26,87,200	3,30,61,100
1886...	45,58,23,000	3,46,28,500	49,04,51,500	1,05,98,200	1,63,32,200	2,69,30,400
1887...	55,27,42,700	6,54,03,800	61,81,46,500	1,18,82,200	2,34,72,500	3,53,54,700
1888...	57,45,47,500	7,78,56,400	65,24,03,900	1,74,74,000	2,71,68,600	4,46,42,600
1889...	47,44,26,100	8,25,78,000	55,70,04,100	88,38,900	2,68,32,600	3,56,61,500
1890...	57,02,97,800	6,33,09,400	63,36,07,200	1,49,56,900	2,31,00,500	3,80,57,400
1891...	53,41,29,400	6,11,20,100	59,52,49,500	1,31,44,800	1,48,26,500	2,79,71,300
1892...	49,74,85,200	7,51,80,500	57,26,65,700	85,01,300	2,33,84,900	3,18,86,200
1893...	36,54,25,500	6,83,07,800	43,37,33,300	87,78,500	1,89,63,000	2,77,41,500
1894...	42,53,40,200	7,16,03,900	49,69,44,100	97,69,500	1,46,38,800	2,44,08,300
1895...	52,81,87,300	9,90,35,600	62,72,22,900	1,12,26,100	2,12,66,000	3,24,92,100
1896...	54,29,93,400	10,55,07,100	64,85,00,500	90,76,400	2,27,87,400	3,18,63,800
1897...	44,51,82,100	9,40,56,700	53,92,38,800	1,12,46,000	2,31,42,600	3,43,88,600
1898...	48,64,96,200	10,49,66,000	59,14,62,200	1,31,09,700	1,71,91,500	3,03,01,200
1899...	55,40,80,000	9,38,50,600	64,79,30,600	1,13,44,700	1,25,26,500	2,38,71,200
1900...	45,61,95,300	11,94,70,200	57,56,65,500	22,69,700	1,12,78,800	1,35,48,500
1901...	49,10,72,700	6,33,21,400	55,43,94,100	69,38,200	74,85,900	1,44,24,100
1902...	57,47,73,000	10,91,16,400	68,38,89,400	63,97,800	23,65,900	87,63,700
1903...	47,76,91,500	6,73,24 800	54,50,16,300	46,60,300	14,06,100	60,66,400
Average for 10 years	49,82,01,170	9,28,25,270	59,10,26,440	86,03,840	1,34,08,950	2,20,12,790

"In last year's report attention was drawn to the fact that American goods were cutting into Lancashire as low as 10 lbs., and this competition was effectively maintained in 1902. The import of 36 inches to 40 yards cloth, made of the finer counts of yarn, weighing 3·50 to 4 yards per lb., was 66 per cent. above that of 1901, the Yangtze ports—a field hitherto particularly our own—absorbing thereof 118,910 pieces as against 67,815 pieces in the previous year, and a regular trade in these goods has now been firmly established.

"Importers express confidence in the future and look forward to sustained inquiries for high-class goods. If by high-class goods white shirtings and fancy goods are meant, their expectations are likely to be fully realised, because these are things the Chinese cannot produce, to which they have got accustomed, and for which they must and are willing to pay any price, within reason. But over the prospects of importations of certain plain cotton goods there would appear to be creeping a shadow which should not be disregarded. Indications of a disinclination to purchase at present values, to the same extent as formerly, are not lacking, and in this connection it is significant to note the revived demand for Japanese and Indian fabrics.

"These articles were tabulated separately in the customs returns for the first time in 1894 and prior to 1900 the average annual consumption was—

	Quantity.
	Pieces.
Japanese drills ...	6,290
,, sheetings ...	18,360
,, cotton flannel ...	85,355

"Drills fell to 518 pieces in 1900 and to 23 pieces in 1901. Last year they leaped up to 11,620 pieces, and sheetings increased by 528 per cent.

"The import of Japanese cotton flannel in 1899 was treble the average of the previous four years and has not appreciably diminished since then, whereas other cotton flannel in 1902 showed a decrease of 54 per cent. as compared with 1901. (A factory in Ningpo, started a couple of years ago, turned out last year 10,500 pieces of a blue striped cotton material mostly intended for underwear, which in cheapness and durability is excelling Japanese fabrics of the same kind and is rapidly increasing in demand.——Extract from Ningpo customs report.)

"In 1898 Indian T-cloths fell from 367,000 to 83,000 pieces, and in 1900 from 84,000 to 17,000 pieces. Last year they rose to 126,500 pieces. It is true that at the same time grey shirtings advanced from 4,121,655 to 6,317,698 pieces, British jeans from 41,083 to 3,60,858 pieces, and that the import of Dutch and American jeans has about doubled; yet considering these figures, in conjunction with what follows, it is hard to resist the conclusion that they point to some modification of the conditions hitherto obtaining.

"While the total import of yarn lags considerably behind that of 1899, which was higher by some 40,000,000 lbs., it has since 1900 continued to rise, the Chinese mills are running steadily, and the raw material thus supplied is all converted into native cloth, in many respects more suited to the needs of the people than the foreign article. The Blackburn Commission pointed out that fully 70 per cent. of the population in the interior is wholly clad in native homespuns and the remaining 30 per cent. but partly clad in foreign cottons. A Chinese will say that eight-tenths of the clothing of the inhabitants of Manchuria is made of native cloth and that only two-tenths are supplied from abroad.

"Ssuch'uan, a great centre of weaving by hand, diminished her imports of grey shirtings by 1,564 pieces, of white shirtings by 17,312 pieces, of American drills by 6,902 pieces, of British sheetings by 8,644 pieces, and of cotton lastings and Italians by 45,400 pieces, increasing on the other hand her imports of yarns by 3,000,000 lbs.* A Canton merchant writes that a greatly improved native demand for grass cloth has set in there, said to be the outcome of the high cost of foreign cotton and other dress materials, and a consequent return to native fabrics as giving better value for the money.

"A singular unanimity on this subject pervades the reports of the Commissioners of Customs. The following is a typical extract: 'As might have been expected from previous experience here (Kiukiang) and elsewhere, the decreased demand for cotton piece-goods was attended by an increased demand for foreign cotton yarn, for the people having acquired a liking for smoother and finer goods than their own native cloth, and finding that the price of such goods was constantly advancing, were obliged to content themselves with cloth woven locally from the foreign spun yarn, which, although it has not the finish of foreign goods, is nevertheless purer and smoother than their own cloth.'

"In 1892 the proportional value of imports of cotton goods to yarn was: goods, 58·14 per cent.; yarn, 41·86 per cent. In 1901 (the figures for 1902 are useless for purposes of comparison) the position was reversed: yarn represented 51·13 per cent. and goods 48·87 per cent. The quantity of foreign yarn imported in 1893 was roughly 1,000,000 piculs, in 1902 it all but touched 2,500,000 piculs (326,500,000lbs.)—an increase of 150 per cent.

"Each spindle running in Shanghai turns out about 200lbs. of yarn per annum (working day of 12 hours), add thereto 100lbs. for night shifts, and assume, on a moderate computation, that 320,000 spindles run the year through. This gives 96,000,000lbs. and estimating the production of the remaining 150,000 spindles elsewhere at 30,000,000lbs. the total amount of yarn spun by foreign machinery, consumed in China in the course of one year, is no less than 452,500,000lbs. Of yarn spun by native methods no statistics are available, nor is it possible even approximately to make a guess at the product of the native looms." . . . . . .

* It is but [illegible]ay have been due to the disturbed state of the province, and that in 1899 [illegible] 12,000 [illegible]0 pieces more of plain grey shirtings than she did last year.

"After what has been stated above, it will suffice to say that the import of British yarn fell some 2,700,000lbs., and that the import of Indian and Japanese yarn advanced by 22,500,000 and 3,000,000lbs., respectively. The output of the Hongkong mill appears to have been consumed locally, as the increase over 1901 is only 122,500 lbs.

"A new factor to be reckoned with is the establishment of yarn spinning mills in Tonkin. There are three of these in operation, spinning principally Indian cotton with 51,104 spindles, and they are making efforts to capture a portion of the Yünnan trade. It is open to question, however, if that province could take large quantities of the relatively high counts (20's) spun in and used throughout Indo-China, 10's being more adapted to the native looms."

VENTILATION OF FACTORIES.

(See *Reports of the Association*, 1892, *p.* 16 ; 1893, *p.* 66 ; 1895, *p.* 133 ; 1896, *p.* 112 ; 1897, *p.* 9 ; 1902, *p.* 1.)

The discussion of this important subject with the authorities engaged the attention of the Committee during a considerable part of the year under report. It may be remembered that the Report for 1902, the publication of which was delayed by the general revision of the Association's Rules, brought the negotiations down to the point when the Collector intimated that "**Government would be "prepared to co-operate with the Association** in investigating the extent "to which the air in cotton mills is vitiated by the presence of impurities, by lend-"ing the services of a **trained analyst** or in such other manner as might be "agreed upon." This was on the 26th of March ; but as the final issue of the complete Report was greatly retarded for the reason already stated, it was thought well to insert in the appendices to that Report further correspondence up to the 30th April 1903. This later correspondence was not, however, alluded to in the body of the Report. It is therefore necessary to give some account of it here.

The letter of the 26th March 1903, which communicated the willingness of Government to coöperate with the Association in investigations, also suggested that the Association should appoint a **deputation to meet the Collector** and arrange the necessary preliminaries to such co-operation. It may here be mentioned that such a deputation had been appointed for this purpose some months before and that the Collector had at that time refused to discuss the matter with them. The Committee, however, in replying to the letter of the 26th March stated simply that they remained willing to co-operate with Government in the matter and had appointed a deputation as desired. A copy of the recently published **Report of the Departmental Committee upon the Ventilation of Factories in England** was forwarded at the same time, as it gave the very latest expert recommendations on the subject and was expected to be of considerable service. Special reference was made to the account given in the said Report of a **portable apparatus** designed by one of the members of the Departmental Committee for the analysis of air in factories. It was mentioned that the Association had ordered one of these apparatus from home and that, on its arrival, they proposed to undertake a series of experiments which would doubtless afford valuable guidance.

Unfortunately the apparatus in question arrived in a damaged condition ; and, as the Committee were desirous of having some definite facts to go on in

their discussion with the Collector, they begged that the proposed conference might be postponed until the new parts of the apparatus, which had at once been ordered from England to replace those broken in transit, had arrived and put the Committee in a position to make the preliminary experiments.

The Collector, however, by a letter of the 25th May, declined to accede to this proposal and insisted on the appointment of a day not later than the 8th of June for the conference in question.

The Committee were anxious to help in every way towards clearing up specific points whose elucidation would tend to define the actual state of matters and to furnish sound grounds for discussion. But they were unable to regard either themselves or the personnel of the Department as in any sense experts; and they were chary of being drawn into an uninformed and inconclusive discussion of scientific issues not fully understood by either side. The nature of the Rules formerly made by Government in this matter was fully exposed in the Association's Report for 1902. It is therefore unnecessary to describe it afresh; but members who know the extraordinary provisions of those Rules will understand that they could not inspire the Committee with perfect confidence that such proposals as the Department might ultimately make would necessarily be reasonable. It appeared to the Committee, moreover, that the manner in which the preliminaries to fresh legislation were being undertaken indicated some readiness to dispense with expert guidance and a disposition to disregard in a peremptory manner the reasonable representations of the Association which had been invited to a formal coöperation. The Association had, on a previous occasion, undertaken expenditure for the conduct of experiments; and these experiments had proved nugatory through the failure of the Department to give that supervision which had been promised. It had been left to them to show the Collector the absurdity of the law he proposed to put in force. They had brought to the Collector's notice the Report of the Departmental Committee not previously known to him. And they had spontaneously imported the newest apparatus wherewith to make analyses of the air in factories. They, therefore, considered that all the practical contributions to the solution of the question had come from them; and they did not feel that the manner in which the matter had been taken up by the Collector indicated a recognition of these facts.

The 4th of June was, however, fixed for the conference with the Collector; and on that date the deputation appointed in July of 1902, with the addition of Mr. Sassoon J. David, attended at the Customs House.

At that conference the Collector invited the Association to formulate a scheme for such a joint effort as had been suggested, with a view to establishing some general principles for the ventilation of factories in India.

Mr. David, on behalf of the Association, recounted the steps already taken by them towards that end, and the circumstances that for the moment prevented their prosecution. He renewed the assurance of co-operation; but submitted that, **pending the final pronouncement of the Board of Trade** on the issues submitted to the Departmental Committee then sitting, little progress could be made, seeing that any rules for the ventilation of factories in India would be to a great extent governed by the decision come to at home. No tests made in Bombay

could therefore determine whether a particular mill was or was not well ventilated with reference to a standard not yet defined. He stated that the Association intended to prosecute its examination of the air in the mills so soon as the apparatus injured in transit to Bombay had been repaired.

The Collector explained that the formal conduct of such an examination was all that Government desired at the present stage, and he suggested that a **Joint Committee** should be appointed to go into the matter and draw up a scheme. He indicated that a feature of the scheme should be an agreement, that **the expenses,** estimated at about Rs. 300 per mensem, should be defrayed **by Government and by the Association jointly** and in equal proportions.

It was objected by the deputation, firstly, that they had no power to pledge the Association to such participation in the expenditure of Government; secondly, that it would be unreasonable to expect so large participation on the part of a private Association of limited numbers, in expenses undertaken for the behoof of the public health of the whole Presidency or of the whole of India; thirdly, that the simplest and most natural course would be that Government should appoint one analyst and the Association should appoint another for the purpose of control, and that Government and the Association respectively should bear their own expenses.

Mr. Martin, the Inspector of Factories, pointed out that it was not intended to legislate for the whole of India, but only for the mills in the Presidency, and not for the general health of the public at large, but only generally so far as workmen in factories were concerned.

Since the deputation had no power to sanction the proposal made, it was agreed that the matter should be **referred to the General Committee** of the Association.

On the invitation of the Collector, a **Joint Committee,** consisting of two representatives of the Collector and two of the Association, was appointed to prepare a tentative scheme for a systematic analysis of the air of the various mills.

It was further arranged that the Secretary of the Association should obtain for the Collector an apparatus of the Scott Haldane type similar to that imported by the Association.

The Joint Committee in question met in the rooms of the Association on the 6th July, when it was agreed at the outset that **the work of the Committee** was limited to recommending a procedure for the conduct of air tests to ascertain what was the position of Bombay mills in respect of ventilation.

It was explained on behalf of the Association that it was not financially or otherwise in a position to undertake any part of the expenses of an investigation which in their view belonged correctly to the functions of Government.

The Inspector of Factories said that the Collector had inferred from the use of the word "co-öperate" in the Association's letter of the 27th September 1902, and from the fact that on a previous occasion the Association's co-öperation had taken the form of participation in the expenditure, that the co-öperation now offered would take the same form. He recognised that it was no doubt unusual that a body like the Millowners' Association should bear any share of the expenses of a Departmental inquiry; but on the other hand he pointed out that it was equally contrary to precedent to allow such a body to take part in the conduct of such an inquiry. He was unable to say whether Government would consent to the one without the other.

Meantime, it was agreed that since the scheme was to be tentative, he should recommend to Government that tests should be made by an analyst to be lent by Government, under the supervision of a Joint Committee to consist of Mr. Engel, Inspector of Factories, and a representative of the Millowners' Association.

These facts were duly reported to the General Committee of the Association with a recommendation that effect be given to this arrangement.

It had, however, been increasingly borne in on the Committee that their position in the matter was entirely misunderstood by the Department. They considered that Government had not at its disposal any specialist competent to deal adequately with the question, and that its previous essay in legislation did not warrant any repetition of the effort to deal with it by local authorities. They were perfectly prepared to help Government so far as a non-expert body could do so; and they considered that they had given proofs of this good will. But they were not prepared to enter, on sufferance, upon a formal participation in proceedings in which, as was apparent, they would be allowed no more than a nominal part, but for which they would afterwards in all probability be held to some extent responsible.

The Committee, therefore, rejected the recommendation of the Joint Committee, and replied to the Collector on the 21st of July, that, having regard to the inability of the Association to bear any part of the expense of the enquiry he desired to hold, they did not press to be admitted to formal participation in an investigation in which, as they fully recognised, **the Department must be dominant and ultimately responsible.** They added that if they had known among their own members or elsewhere in India a person capable of making a really authoritative pronouncement on a subject which in England had been considered to require the study of the most eminent specialists, the position would have been different. Again, if Government had been prepared to bring out from England such a specialist, and to be guided by him in establishing a standard or standards of ventilation for all India, or even in saying whether, and how far, the standard recently recommended by the Departmental Committee was applicable to India, the Association would be able to receive the proposals with the cordiality they would like to feel in such a matter. But they thought it their duty to the Government as well as to themselves to say that in such a matter, and particularly in view of Government's previous effort at legislation in respect of it, the report and recommendations of persons not specially qualified would

fail to command real confidence. And although most anxious to find common ground with the Department, the Committee were unable to free themselves of misgivings lest a formal participation by them in an enquiry conducted on the lines suggested by the Collector might, erroneously, be supposed to imply the existence of such confidence. They were aware that the tests to be made by the Department with the help of an assistant from the laboratory of the Chemical Analyst to Government would ostensibly be tentative in character. But, while it was evident that an investigation so conducted would be inadequate as a basis of Legislation, it appeared to the Committee that if it did not furnish such a basis it was useless and even liable to misconstruction. They therefore thought it would tend to the clearness of the position if they **abstained from formal participation** in the particular enquiry, and confined themselves to using, as they gladly would, their influence with Millowners to secure all facilities for those who might be appointed by Government.

In conclusion, they repeated the recommendation that the Government of India should be moved to **bring out from England a recognised specialist** in ventilation to the end that a reasonable standard or standards should be established for the whole of India. And a request was added that when Government might feel itself in a position to proceed to fresh legislation on the question, the Committee of the Association might be allowed **the privilege of reporting on the proposals.**

The Collector in his reply expressed regret that the Association were unable to participate in the enquiry proposed, thanked the Committee for their offer to use their influence with Millowners to secure facilities for those who might be appointed to conduct the investigation, and stated that the views of the Association, as expressed in the letter of the 21st July, would be **laid before Government.**

Nothing further has been heard on the subject up to the time of preparing this Report; and it only remains to be said that the Scott Haldane apparatus ordered for the Collector, with spare parts, was received in August and duly made over to the Department, as also another which had been procured at the same time for a member of the Association.

Some other members have asked the Association to procure similar apparatus for them ; and, while the Committee could not see their way to undertake such purchases, they communicated to applicants the name and address of the maker, which is Messrs. C. E. Muller, Orme & Co., 148, High Holborn London, W. C.

The cost of the apparatus (with spare parts, which it is well to have) comes to about £4-15-0. In ordering for India special instructions should be given to see that the " water jacket" is water-tight, as the dry atmosphere tends to set up leakage.

The Committee have to express their indebtedness to Dr. John Scott Haldane, F.R.S., one of the members of the Departmental Committee and the inventor of the apparatus in question, for the trouble he kindly took in going over and rectifying the apparatus before it was sent out. (*Appendix* **C.**)

INDUSTRIAL WATER CHARGES.

(See *Report for* 1901, *pp.* 1 and 41; 1902, *p.* 26.)

Towards the end of the year, the Committee took the opportunity afforded by the approach of the Municipal elections to bring into prominence the question of the exorbitant charges made in Bombay for water used for industrial purposes.

On the 29th of December, a circular was issued to members suggesting that they should decline to pledge their votes to any candidate who had not publicly undertaken to advocate an equitable revision of the water charges in question.

As soon as the names of the various candidates were obtained, a letter was addressed to each of them, stating the essential facts in the matter and setting forth the specific reforms proposed by the Association. To this letter was attached for signature a slip in which the candidate might, if convinced, notify his readiness to support the proposals in event of his being elected.

The letter presented a good summary of the arguments that had been on previous occasions pressed by the Association upon the attention of the Corporation; and for this reason is re-printed here for the guidance of members.

MILLOWNERS' ASSOCIATION,
BOMBAY, *January* 1904.

DEAR SIR,

The Committee of the Millowners' Association understand that you propose to stand for election to the Municipal Corporation, and, being desirous that candidates should have an opportunity of making some declaration of their position in regard to the Industrial Water Charges in this City, they direct me to lay the following facts before you.

2. In Section 140 of the Act it is laid down that the Water Tax shall be "so many per "centum of the rateable value as the Corporation shall deem reasonable with reference to the "expenses of providing a water-supply for the city."

3. The expenses of providing the water-supply come to about As. 3·07 per thousand gallons supplied.

4. The Water Tax is levied as 4 per centum, which represents about 11 pies per thousand gallons.

5. A Tax yielding 11 pies is out of all relation to a cost of As. 3·07, and does, therefore, not conform to the provisions of the Act.

6. Bombay Millowners pay As. 12 per thousand, while their competitors pay as follows:—

Oldham	... ...	8·3 pence.
Manchester	... ...	7·76 „
Blackburn	... ...	7·76 „
Bolton	... ...	6 „
Glasgow	... ...	4 „
Ahmedabad	... ...	4 annas.
Sholapur	... ...	9 „
Madras	... ...	4 as. 5 pies.
Nagpur	... ...	1 anna 7 „

7. In East Africa and elsewhere there are great and growing markets both for grey and for coloured goods; and Bombay, from her position and from the fact that the retail trade

in certain of those markets is mainly in the hands of British Indians, ought to supply the demand. But the comparative rates quoted above show that Bombay, with any rate exceeding five annas per thousand gallons, is unable to compete. This is especially true in respect of coloured goods, of which enormous quantities are taken by East Africa from Europe.

8. At twelve annas the Industrial Water in Bombay yielded in the ten years an average annual revenue of Rs. 5,17,000.

9. At four per cent. the Water Tax in the same years yielded an average of Rs. 6,31,000.

10. The total quantity of water supplied to the City is about 36 million gallons per diem. Of this "the major part"—say 18 millions—is, by official admission, wasted. Such waste naturally occurs among the users who are rated at 11 pies only. The whole quantity used and wasted by this section of the public is about 30 millions. Deducting 18 from 30, we have 12 millions per diem required and used for domestic purposes. Twelve millions per diem equals 4,380 millions per annum. The value of this water to the city at cost price, As. 3·07 per thousand, is about Rs. 8,40,000; whereas only Rs. 6,31,000 is paid by this section of the public for a total quantity of no less than 10,950 millions consumed and wasted by them. 4,380 millions, if charged for by meter at As. 4 per thousand, would yield revenue Rs. 10,95,000. It is therefore natural that all landlords who can get water at 11 pies per thousand should oppose the introduction of meters. As soon, however, as the rating by valuation is raised to a point that yields about nine lakhs, a disposition on the part of landlords to adopt meters may be looked for, and the city will save large quantities of water which, being offered at reasonable rates, will be taken by manufacturers increasingly.

11. A rating of six per centum gives revenue about Rs. 9,46,500 or a gain of Rs. 3,15,500.

12. This enables the Corporation to give away Rs. 3,01,582 by reducing the Industrial Water charge to As. 5 per thousand.

13. Those engaged in the industry know that at this rate a greatly increased consumption of water for industrial purposes would exist, every thousand gallons still yielding a profit of nearly 63 per cent. It is probable that this source of revenue would so expand that it would shortly be found possible to establish for all users by meter, private and industrial, a uniform rate of four annas.

14. For the present, however, my Committee think it will be sufficient to press for the reduction of the industrial water charge to As. 5 per thousand gallons and the enhancement of the water rate to 6 per centum of the ratable value.

15. I am to beg that, if you should be prepared to support proposals to this effect in the event of your being elected, you will be good enough to sign and return the enclosed slip, in order that your name may be communicated to the members of the Association and their friends.

I am, dear Sir,
Yours faithfully,
FREDERICK NOEL-PATON,
Secretary.

SLIP FOR SIGNATURE.

THE SECRETARY,
MILLOWNERS' ASSOCIATION,
BOMBAY.

In the event of my being elected a member of the Municipal Corporation, I will in every way do my utmost to procure a reduction of the meter charge for water for industrial purposes to not more than As. 5 per thousand gallons; this concession to be recouped by an adjustment of the water rate under Section 140 of the Act.

BOMBAY, _____

In para. 3, the cost of the water supplied to the city is shown, in accordance with an estimate made by the Municipality, at As. 3·07 per thousand gallons. It is now understood that a recent calculation gives reason to believe that it approximates more nearly to As. 2·5.

It was not expected that a very large number of candidates would definitely commit themselves by signing the promise submitted to them, especially as one of the opponents of reform, in a letter to the public press, suggested that persons doing so should be boycotted at the polls. But it was considered desirable to bring the question forcibly to the notice of persons interested in Municipal affairs, in the assurance that the facts and arguments stated would, if carefully considered, ultimately bear fruit.

The circular in question had the effect desired and gave rise to keen discussion of the question both in the Corporation and in the public press. The balance of argument in both cases was palpably with those who sought reform; and this fact was recognised by that part of the public who were neither landlords nor millowners. In the debate on the Municipal Budget Estimates, the Hon'ble Mr. Vithaldas D. Thackersey proposed, and Mr. Sassoon J. David and Mr. Jamsetjee A. Wadia, respectively, seconded and supported a motion for a reduction of the industrial water charges; and although the motion was lost on a division, the discussion had the advantage of leaving no doubt as to the nature of the considerations that brought about its defeat.

FACTORIES ACT.

(Shuttle Guards.)

(See *Association's Report for* 1902, *pp.* 35 *and* 102.)

It may be remembered that, towards the end of 1902, the Chief Inspector of Factories raised the question of the adoption of Shuttle Guards, asserting that a large number of accidents had been caused by flying shuttles. The Committee in their reply stated that they were not fully satisfied that the accidents from flying shuttles could be held sufficiently numerous to call for the adoption of appliances that would unquestionably reduce the output. They admitted, however, that accidents did occur, and that it lay within the province of Government to say whether protection was necessary. They therefore did not contest the principle that some sort of guard was necessary, but asked that Government should not seek to prescribe any particular form. It would, in their opinion, be sufficient if the authorities reserved the right of condemning any pattern that was demonstrably inefficient. The Committee, at that time and on the information supplied to them, were of opinion that **fixed guards** were out of the question; but as a matter of fact it appears that in almost every case this form of guard, for which the Inspector of Factories had originally indicated a preference, has been adopted. The Committee in their letter of the 26th January 1903, undertook to let the Inspector know what was the result of the experience acquired with various types of guard then on their way out from Home; but no report on the point was received from the mills in question till a circular was issued at the instance of the Chief Inspector of Factories in November last. Even then only six mills replied, and in all these mills it appeared that the fixed form of guard had been adopted. These facts were duly communicated to the Inspector of Factories on the 5th December. (*Appendix* **D.**)

PROTECTION OF MACHINERY.

(FEEDING ROLLER OF COTTON OPENER.)

An enquiry was in September last addressed to the Association by an up-country mill, not a member of the Association, as to the rules in force for the protection of Feeding Rollers of Cotton Openers. It appeared that an order for the enclosing of such rollers had been issued to the Company in question by an Officiating Inspector of Factories, whose experience was understood to be slight ; and it was argued that, in event of the orders not being carried out, the District Magistrate, who was stated to know even less of such matters than the Inspector, would be likely to follow the matter up.

The Association, of course, exists for the purpose of dealing with points of this nature, and the extent of the work done by it in the interests of the milling industry throughout India makes a strong claim on the support of all Companies engaged in that industry, but precludes indefinite expansion of activity without that support. The Committee were obliged therefore to reply, in the case cited, that they found it impossible to take up questions relating to mills, not members of the Association. A copy of the Rules of the Association was enclosed at the same time with an expression of the hope that the Company would become a member. In their reply, the Company suggested that the purport of their letter had been misunderstood and that the information required by them might have been obtained through the Upper India Chamber of Commerce. The Committee therefore thought it well to explain that they were obliged to discriminate between communications made to them by individuals, not members of the Association, and communications made to them by recognised public bodies. (*Appendix* **E.**)

BOILER ACT.

GUARDING OF SAFETY VALVES.

On the 3rd February the Collector of Bombay addressed the Association on the subject of the guarding of safety valves on mill boilers. His statement of the reasons for proposing to adopt some measures in the matter opened with the following sentence :—

" The Board of Trade Rules require that one safety valve in each boiler should be put beyond the control of the Engineer in charge."

This sentence, addressed to a body of millowners and without any qualification in respect of that class of boilers with which alone such a body is concerned, conveyed the meaning that the rules in question applied to factory boilers. When, however, it was, after due enquiry, brought to the notice of the Collector that the said rules did not so apply, he replied : " On reference to this office letter No. B. I.—473 of 3rd February last, it will be seen that the Board of Trade Rules are not stated to be in force in factories in England, where no legislation similar to the Bombay Boiler Inspection Act exists at present."

Comment is unnecessary.

The Collector continued to say that up to that time no special attention had been paid to the necessity of enforcing a similar rule in the case of boilers in the Bombay Presidency ; but that, for reasons which he did not think it necessary to state, it seemed desirable that some action in that direction should be taken. The Collector quoted an opinion of the Indian Boiler Commission in favour of the adoption of such a rule for boilers in India ; and requested that the recommendations of that Commission should be given effect to. Those recommendations were stated to be that every boiler should be fitted with one "lock-up" safety valve to be sealed by the Inspector at the time of his annual visit. Certain details were given ; and a sketch, showing how safety valves could be encased and sealed, was enclosed.

A Special Committee was appointed to consider and report upon this matter, and steps were taken to procure from individual members such opinions and recommendations as they might desire to advance. A large number of the opinions so obtained pointed out the practical inconveniences that were likely to result from the inaccessibility of the valve. When the Committee, on the 7th of April, addressed the Collector on the subject, they mentioned that all safety valves are apt to leak and require periodical grinding; and it was therefore expressly assumed that when this course became necessary, the Inspector would re-seal the casing without making any charge. But on the whole the Committee, being to some extent influenced thereto by the supposed statement of the Collector that such a rule was considered necessary in England, were disposed to assent to the principle advanced; and they duly communicated this fact to the Collector.

In the beginning of May it was stated to the Committee that in reality no such rule existed in England so far as factory boilers were concerned. They therefore communicated at once with the Vulcan Boiler and General Insurance Co., Ld., the Manchester Steam Users' Association, and Messrs. Hick, Hargreaves & Co., on the point, and at the same time wrote to the Collector and requested that, pending the receipt of the replies, no final orders in the matter should be issued.

The replies in question were received in the beginning of July and were to the effect that in England factory boilers were subject to no such rules as it was proposed to introduce in India. This information, together with copies of the letters containing it, was communicated to the Collector on the 11th of July, and a hope was expressed that, in view of this circumstance, he would recognise that no good reason existed for instituting such a rule as, both in this country and in England, had in practice been found unnecessary.

On the 17th July the Collector acknowledged the receipt of the letter and annexures, and stated that due weight would be given to the opinions and information contained in them. He then stated that his letter of the 3rd February had contained no assertion that the rules in question were in force in factories in England. In conclusion, he expressed regret for the delay that had attended the reply to the Committee's previous letter, in which it had been requested that no orders in the matter should be issued pending the receipt of the information from home ; but it was added that orders to this effect had been duly given.

Up to the time of preparing this report nothing further had been heard in the matter. (*Appendix* **F.**)

INSPECTION OF BOILERS.

(Appointment of a Senior Inspector of Boilers.)

In March 1903 it became known that the post of Senior Inspector of Boilers was vacant and that there was likelihood of an appointment being made to that post of a person having insufficient experience of mill boilers. One of the members therefore wrote in to the Association urging that the Collector should be addressed on the subject of the importance of appointing some one with the fullest qualifications. It was known that the Inspector whom it was intended to appoint was in other respects thoroughly competent; but such members of the Committee as it was possible to consult in a matter of immediate urgency were of opinion that actual experience of mill boilers was of the first importance. A letter was accordingly addressed to the Collector; but the appointment which the Association had deprecated was definitely made; and at a subsequent discussion of the whole Committee it was held by the majority that in a thoroughly competent engineer actual mill experience was not a necessary qualification for an Inspectorship of boilers. (*Appendix* **G.**)

FACTORIES ACT.

(Urinals.)

(See *Association's Report for* 1892, *pages* 17 *and* 23.)

In the course of the year the Agents of a mill situated in the Thana District consulted the Committee about an order made by the local Chief Inspector of Factories that the Company should erect for its female operatives urinal accommodation as distinct from latrines.

Of the Bombay Rules under the Factories Act, the following is that which governs the matter in question :—

"10. Every Factory shall be provided by the occupier thereof with latrine and urinal accommodation for its operatives, and in such manner that the accommodation for females shall be apart and screened from the divisions for males. The divisions for females shall be marked in the vernacular in conspicuous letters 'For Females only.' Those for males shall be similarly marked 'For Men only.' Apart from the urinal accommodation latrines shall be provided with seats in the proportion of one to every fifty or fraction of fifty operatives employed."

The Committee in its reply, dated the 20th August, stated that the absence of any real need for urinals as distinct from latrines in the case mentioned was so obvious that they thought it would be readily recognised by the Chief Inspector of Factories at Thana if properly put before him. It was therefore suggested that he should address that official; and the Committee added that they would be interested to learn the result of the representations.

From a subsequent letter it appeared, however, that the official in question had insisted on the literal fulfilment of the rule, by screening off for females at certain proportion of the urinal accommodation for men. (*Appendix* **H.**)

HOURS AND DURATION OF ATTENDANCE OF SPINNING MASTERS AND ENGINEERS OF COTTON MILLS.

In reply to an enquiry from the Dewan of State, Kishengarh, the Committee stated that Engineers and Spinning Masters in Cotton Mills in Bombay are supposed to be in the mills before they start in morning and that they do not leave until the Departments are cleaned after the men have gone. Say, 5-30 a.m. to 7 p.m. with a recess of an hour.

INDIAN ELECTRICITY ACTS.

No. XIII of 1887 and No. II of 1903.

(Inspection of Electric Light Installations in Factories.)

On the 23rd of June 1903, certain members addressed the Committee on the subject of the manner in which the Inspection of Electric Light Installations in mills had been conducted under the old Act and was continuing under the new Act. It was stated that under the authority of the Commissioner of Police the practice had arisen in Bombay of conducting such inspection annually; and it was argued that an annual inspection was unnecessary, seeing that the installations were already inspected every year by the representative of the Fire Insurance Companies.

At the date in question, no Rules under the new Act had been issued locally; but it was ascertained on enquiry that **Draft Rules** had issued from the Government of India on the 16th June and would appear in the *Bombay Government Gazette* on the 25th idem. As soon as they were published, a copy was procured and circulated to the Committee together with the letter of the members who had raised the question of Inspection. (See *Bombay Government Gazette* of June 25th, 1903, page 755). It was intimated in the Notification in question that the said Draft Rules would be taken into consideration on or after the 15th day of September.

The matter was one that involved technical issues and certain others of a practical nature which demanded the most careful consideration. Some time was employed in the examination of these issues; but on the 22nd July the Committee addressed the Government of Bombay in the matter. It was pointed out that the Notification gave the proposed Rules "Imposing restrictions on the "use of energy not supplied under Part II of the said Act at a pressure "exceeding 100 volts." It was apparently the intention that the said Rules, therefore, should not apply to factories using energy at or under 100 volts. Reference was also made to the working of Rule 3 (1) which provides that "Where notice has been given by any person under Section 31 of the Act, the "District Magistrate or, in a Presidency Town, the Commissioner of Police, "shall, on receiving such notice, forthwith report the circumstance to the "local Government, and thereupon any Electric Inspector appointed under the Act "may enter, inspect and examine any place in which the Inspector or Officer "has reason to believe that there is any appliance or apparatus used in the "generation, supply or use of electricity." It was here evidently the intention that such entry or inspection should take place only "thereupon," that is to say, only on receipt of the notice given under Section 31 of the Act at the time of the first installation of the appliance or apparatus. It was therefore urged that, in view of the recurring inspections made by Inspectors on behalf of Fire Insurance Offices under the **Phœnix Fire Office Rules,** additional inspections by Inspectors

under the Electricity Act would be superfluous and vexatious and would give power of an undesirable kind to such Inspectors. The Committee for these reasons recommended that in cases where a manufacturer under Section 31 of the Act gave the prescribed Notice of installation and attached to such notice a certificate signed by the Inspector on behalf of the Fire Insurance Companies that the Installation was in accordance with the Phœnix Fire Office Rules and with the Rules under the Act, such certificate should be accepted by Government as satisfying the requirements of the Act in respect of Inspection under Rule 3, but that, if Government considered this insufficient, they might have an independent Inspection by their own Inspector only once after the installation, provided that such Inspector should not be in any way connected with the Fire Insurance Companies.

It was further pointed out that the wording of the Rule when taken in conjunction with that of Rule 3 (2) was so far ambiguous that an Inspector under the Act might think himself entitled to make periodical inspections in addition to those of the Fire Insurance Companies and to collect a fee for each occasion. It was added that the meaning of the word "Officer" used as an alternative to "Inspector" in the Rule 3 (1) was not clear to the Committee.

In conclusion, reference was made to the fact that the Draft Rules in question did not appear to include any rules under Section 33 (2) (*i*) "for the "appointment of Electric Inspectors by the Local Government and to prescribe "the qualifications to be required of such Inspectors and the remuneration and "duties." In this respect the Committee suggested that it should be laid down that Electric Inspectors under the Act must be persons having no relations with a Fire Insurance Company or Companies or any Association of Fire Insurance Companies.

None of these recommendations was given effect to in the **Definitive Rules** which will be found in the *Gazette of India* of December 26th, 1903, page 1103.

The text of the Act will be found in the *Gazette of India Extraordinary* of March 14th, 1903. (*Appendix* **I.**)

INCOME TAX AND THE DEPRECIATION ON FACTORY BUILDINGS.

(See *Association's Reports*, 1895, *pp.* 20 *and* 186; 1896, *pp.* 14 *and* 98; 1897, *pp.* 12 *and* 77.)

It is known that the Income Tax authorities in Bombay do not allow a millowner, when calculating the amount of net income assessable to Income Tax, to make any deduction from gross income on account of depreciation of Factory buildings. It is also known that in the **North-West Provinces** the Income Tax authorities, governed by the same Act that has force in Bombay, allow 2½ per cent. deduction on this account. It has been ascertained that in **Calcutta** a five per cent. deduction in respect of machinery and buildings is allowed. The Committee were also very positively assured by one of their own members that in **England** a deduction of 2½ per cent. is conceded, and were so led into asserting this as a fact when addressing the Collector of Income Tax. The member in question undertook to substantiate his statement by communication with authorities at home.

The question was the subject of correspondence with the Collector of Income Tax in 1897 (*see* Report for that year) when, by a letter, dated 14th August, that official communicated the decision of Government that such deductions were to be disallowed. The Association did not at that time pursue the discussion, possibly because Mr. Marshall, the Secretary, was then at home on leave. They had themselves, in their letter of the 15th May 1897, drawn the attention of Government to the allowance made in the North-Western Provinces; and the arguments on which they had relied in soliciting a similar concession in Bombay appeared to them inherently so unassailable that the failure of Government to give effect to them was not improbably taken as indicating a simple determination to admit no argument on the subject.

On the 1st September 1903, the matter was again raised by a member, who forwarded copy of correspondence had by him with the Collector of Income Tax and asked the Committee to approach Government on the subject.

The Committee thought it well, before addressing Government, to verify the facts as to the procedure at present in force in other parts of India and to procure the co-operation of industrial bodies in places where that procedure was identical with that in Bombay. They therefore addressed the Jute Manufacturers' Association in Calcutta, the Ahmedabad Millowners' Association, and the Upper India Chamber of Commerce. Allusion was made to **the declaration of the Government of India** that in determining the net income assessable to Income Tax, such charges only as are necessarily incurred for the purpose of deriving the income and for the purpose of providing against the destruction of the capital from which the income is derived (in other words, insurance charges actually incurred), are allowed (*see* letter of Collector of Income Tax, Bombay, No. 1764, dated 24th November 1896; Annual Report of the Association for 1896, page 99). The Committee confessed their inability to imagine on what principle a provision against the inevitable destruction of capital by the process of deterioration should be denied an exemption accorded to a comparatively speculative provision against a loss of capital by fire which might or might not occur. They therefore **proposed** that a **joint representation** should be made to Government moving them either to allow a reasonable deduction for depreciation of building or to make some statement of the grounds on which they refused to do so.

The Indian Jute Mills Association in their reply, dated 17th October, informed the Committee that **in Calcutta** the practice is to allow a deduction from profits of 5 per cent. against depreciation of mill buildings and machinery; that renewals of machinery, etc., are included in the deduction of five per cent.; that this sum must be shown in the Company's accounts; and that, if a less sum be set aside for the purposes named, that sum only is allowed by Government as a deduction from profits in ascertaining the amount to be assessed.

The Ahmedabad Millowners' Association intimated their readiness to support any representation the Committee might make to Government in the matter; but the Upper India Chamber of Commerce, while favouring the Association with copies of **interesting correspondence,** published in their Annual Report for 1898, page 71, relating to the concession enjoyed in their Province,

intimated that they were not prepared to move in the matter. The correspondence kindly forwarded by the Upper Indian Chamber included a letter No. 1053, dated 10th July 1897, from the Collector of Income Tax, Bombay, to Government, in which the following sentence occurred :—"In England the Income Tax authorities allow deduction on account of depreciation in machinery alone, and do not allow deduction on depreciation of buildings." As this was the letter on which the orders of Government in that year were presumably passed, it seemed probable that the statement above quoted had contributed largely to the decision.

The Committee, therefore, addressed the Collector of Income Tax, under date the 11th December, setting forth the facts and arguing that, since mill buildings, subject as they are to continuous vibration and traffic, deteriorate considerably, since this deterioration is in fact a destruction of capital, and since the repair of such deterioration is indispensable to the continued deriving of the income, the existing system put a premium upon bad finance as well as imposing a charge that was both absolutely and relatively unjust. In conclusion they begged that the question might be referred to Government for reconsideration.

Copies of this letter were forwarded to the Associations with which your Committee had been in communication.

Shortly after the receipt of the letter in question, the Collector of Income Tax invited the Secretary to see him on the subject, when it was found that he was disposed to dispute the fact, asserted by the Committee on the authority of one of their number, that a deduction of 2½ per cent. was made in the United Kingdom in respect of buildings. It was afterwards discovered that the Collector's doubts were well founded; and when replies were received in February from those authorities at home to whom the Committee's informant had applied for confirmation, it was found that no such allowance is, in fact, made in England. (*Appendix* **J.**)

BONUS AND ACCIDENT FUND AND PERMANENT DISPENSARIES FOR MILL HANDS.

It will be remembered that at the last Annual General Meeting of the Association Mr. Sassoon J. David, in the course of his remarks, alluded to the desirability of formulating some scheme that would interest the mill hands in the prosperity of the concerns to which they belonged, and suggested the establishment of Provident or Compassionate Funds—his object being to improve the condition and prospects of the operatives and increase their efficiency. The matter was not lost sight of by Mr. David, and in the course of the year he submitted, for the consideration of the Committee, a lengthy memorandum which, he considered, might form the nucleus of a scheme for the establishment of—

(1) A Bonus and Accident Fund;

(2) Permanent Dispensaries for Mill Hands.

This memorandum was in due course considered by the Committee, and it was felt that the best course to adopt was to lay Mr. David's scheme before the general body of members in the hope that they might be able individually to give effect to the project in the manner most suitable to their own conditions.

This was accordingly done by circular dated 10th November 1903, and it only remains to once more place on record the Committee's appreciation of the trouble taken by Mr. David in formulating the proposals. For convenience of reference the memorandum referred to is printed in *Appendix* **K**.

HOUSING OF MILL HANDS.

(See *Report for* 1901, *pp.* 32—60.)

The Committee have had further correspondence during the year with the Bombay Improvement Trust with regard to the provision of quarters for operatives employed in the various Cotton Spinning and Weaving Mills in Bombay. Reference to the Association's Report quoted above will show that the Trustees expressed their willingness to co-operate with the Association, provided that it could be shown that quarters of the dimensions suggested by the Committee could be constructed within the limits of cost laid down by them. The Trustees, however, in working out the plans and estimates found it was impossible to keep within the Association's limits owing to the heavy incidence of the cost of accessories such as passages, verandahs, drainage, water-supply and latrine accommodation. In a letter, dated 23rd May 1903, the Trustees explained that to keep the cost of these quarters as low as possible, consistently with sanitary requirements, it would be necessary to reduce the size of the rooms, which the Association suggested should be 12′ × 10′ × 10′ at a cost of Rs. 350 inclusive of latrines and connections when necessary.

The Trustees submitted detailed estimates of cost and returns which the Committee had the advantage of considering along with certain notes by Mr. Sassoon J. David, the representative of the Association on the Board of the Trust, and it was with satisfaction that they found so considerable a reduction to have been effected in the estimates which had formed the subject of those notes. The figures given—as, for instance, the estimates of rentals Rs. 2-8-0 and Rs. 2-12-0 per mensem for rooms of the dimensions figured—appeared to the Committee difficult of attainment, seeing that Rs. 2 had always appeared to them to be about as much as could be regularly counted on. The Committee, however, did not wish it to be said that negotiations which had already occupied so long a time and whose importance they fully recognised had failed through captiousness on their part. They were given to understand that the Trust had given much attention to these estimates, and since it clearly appeared from the statement furnished by the Trust that no rental less than Rs. 2-8-0 in the one case and Rs. 2-12-0 in the other would fully provide for interest, outgoings and sinking fund at the rates agreed upon, the Committee considered that Millowners might reasonably be expected to accept this risk in conjunction with a scheme which in some respects should be to their advantage. In addressing the Trustees, however, under date 11th July 1903, the Committee stated that greater economy and simplicity of arrangement would be attained if, instead of paying to the Trust a composite sum made up of interest and sinking charges and further setting aside so much for outgoings, the Millowner should pay the Trust a net rental of Rs. 30 or Rs. 33, as the case might be, per room per annum, the Trust on its part undertaking all charges for up-keep, etc. To sum up—

(*a*) A Millowner, having decided how many tenants he could find among his employees, and having found the land for the erection

of chawls on the model shown in the Trustees' plans, would ask the Trust to erect as many rooms as he expected to fill.

(*b*) The Trust would erect the rooms in accordance with the plans referred to, and would thereafter, during a period of 37 years, bear all charges for repairs, rates, taxes, insurance and sinking fund.

(*c*) The Millowner would pay to the Trust a rental of Rs. 30 or 33 per room per annum, according as the rooms were of the greater or less dimensions shown in the plans submitted by the Trust, and at the end of thirty-seven years the chawls would become the property of the Millowner.

Replying to the Association, under date 14th October 1903, the Trustees stated that it appeared immaterial to them whether payment should be made at a percentage of the cost plus a Sinking Fund or by means of a rent calculated to produce the same results. The Trustees proposed that a practical experiment should be made by a few mills whose representatives might formulate definite proposals on which a certain number of quarters might be constructed. It was also stated that in the course of these business arrangements an endeavour would be made by the Board to remove all legal and other difficulties which might be found to arise, and that after a few experiments had been made, the Millowners, as well as the Board, would be in a position to determine how to extend similar operations. Concluding, the Trustees expressed the hope that the Association would be able to put them in communication with a few mills which desired to provide quarters for their operatives.

The correspondence was in due course circulated among the members of the Association for favourable consideration.

The Committee desire to place on record their appreciation of the services rendered in this matter by Mr. Sassoon J. David. Their thanks are also due to Messrs. Bomonji D. Petit (The Chairman of the Association), H. E. E. Procter, N. N. Wadia and D. E. Wacha, all of whom were good enough to act on a Sub-Committee for the purpose of considering the proposals of the Improvement Trust. (*Appendix* **L.**)

MUNICIPAL TAXATION.

In the course of the year the Committee addressed the Bombay Chamber of Commerce, enquiring whether that body would be disposed to engage with the Association in concerted action to procure a transfer of Municipal taxation from trade and industry to property.

The Committee of the Chamber replied stating that they had not sufficiently studied the general taxation of Bombay in comparison with that of other towns in India to say at once what prospects existed of establishing a good case for local reform of so wide a range. They promised, however, to go into the matter and to communicate with the Association again in due course.

REDUCTION IN THE RATES OF FREIGHT ON COTTON FROM BOMBAY TO CHINA.

(See *Association's Reports*, 1901, *p.* 36 ; 1902, *pp.* 18 *and* 70.)

Further correspondence during the year with the Associated Liners has, the Committee are glad to say, resulted in a reduction of the gross rate of freight on yarn to Hongkong from Rs. 14 to Rs. 12, by steamers leaving Bombay on or after 1st June 1903. This reduction was notified to the Association on 21st May 1903, and the thanks of the Committee were, in due course, conveyed to the P. & O. S. N. Company and the other Liners. (*Appendix* **M.**)

RAILWAY CHARGES FOR CARRIAGE OF MILL PRODUCE.

In July 1903 the Secretary of the Baroda State Mill addressed the Committee asking for their assistance in procuring a reduction of the present railway rates for the carriage of Piece-Goods, Yarn and Cotton Twist from Baroda to Cawnpore, Amritsar and other places. It was pointed out that special rates were allowed to the Mills situated in Ahmedabad ; and the Baroda Mill asked for the same concession.

The matter was considered by the Committee, but they felt that it was not one in which they could intervene with any substantial hope of success.

MUNICIPAL LICENSES.

Coal Storage on Bunders.

READ City of Bombay Municipal Act, Section 394 (1) (*d*) and Sub-section (3). Under the said section it is laid down that a license must be taken in respect of any such premises, other than "Mills for the spinning and weaving of cotton, wool, silk or jute," as may be used for the storage of coal. The exemption in favour of textile mills is understood to extend only to the mill "premises," and not to any other premises used for the storage of coal for mill purposes. But communications received from members from time to time indicate that this fact is not universally understood ; and in one case the Committee was invited to intervene between the Municipal authorities and a member who considered that he was being wrongfully charged with a License Fee.

From time to time Millowners have occasion to land large quantities of coal on the bunders, and it sometimes happens that there is delay in its removal. In such cases the Municipal Superintendent of Licenses calls upon the person so using the ground, to take out the license prescribed under the above section ; and some owners of mills, being accustomed to the exemption accorded to them, so far as their mill premises are concerned, regard the levy of this tax in respect of bunder storage as an injustice. The particular case to which allusion has been made was of this nature ; and the Committee were favoured with copies of a protracted correspondence that had passed between the member in question and the Municipal authorities. But the Committee considered and replied that no good purpose would be served by intervention on their part at that time.

Storage of Oil.

(See *Association's Report for* 1901, *page* 38.)

The Company with which the Association two years ago had some correspondence on the subject of a demand made by the Municipal Superintendent of Licenses for the payment of a License Fee in respect of a part of the mill

buildings used for the storage of oil used in the mill itself, communicated again with the Committee in March of 1903. The Committee had on a previous occasion expressed a wish to be informed of any further developments that might take place, and the Company duly reported that, in spite of the hostile decision of the Magistrate in the action brought by the Municipality in 1902, the same authority again took out a summons in 1903, but withdrew the case before it was called for hearing. (*Appendix* **N.**)

COTTON DUTIES ACT, II OF 1896.

(EXCISE DUTIES ON CLOTH AND THE RETURNS OF PRODUCTION.)

(See *Reports*, 1900, *pp.* 3, 22, 23; 1901, *pp.* 20, 49; 1902, *pp.* 17 *and* 31.)

During the year under review Members and others have repeatedly pressed the Committee of the Association to agitate for the abolition of the Excise Duties upon cloth. From the terms of the representations received it is clear that the persistent endeavours made by the Association in this matter and the reasons for their present abstention from further effort are not commonly known. It is, therefore, thought desirable to reprint here the extremely explicit reply, elicited from Government in May of 1901, by the repeated representations made to them by the Committee.

The text of that reply was as follows :—

" With reference to the correspondence ending with the letter from this Government, " No. 1923, dated 20th March last, I am directed to inform you that the Government of India " can hold out no hope that the Customs and Excise duties on cotton goods will be abolished. " In Government letter, No. 885, dated 7th February 1900, the assurance of the concern with " which the Governor-General in Council viewed the depressed state of the Spinning and " Weaving industries in Bombay was conveyed to you, and it was explained that so long as the " Customs duties on cotton cloth were maintained it was not possible to abolish the Excise " duties. Under instructions from the Government of India, I am now further to explain that " the Customs duties on cotton goods form part of the general Customs duties imposed after " much deliberation, and that the Governor-General in Council could not entertain a proposal to " abolish the duties on cotton goods while retaining the other duties. The abolition of all the " duties, including the cotton duties, would, therefore, be the only means of meeting the wishes " of the Association. With regard to that large question I am to say that the policy of the " Government of India is to maintain the Customs duties as a permanent part of the fiscal " arrangements of India."

In deciding what weight was to be attached to the final statement that the Customs duties were to be " maintained as a permanent part of the fiscal arrangements of India," the Committee have thought it right to recognise the general movement of modern Governments towards widening the basis of taxation and retaining in normal times all the revenue machinery that might be required in an emergency.

The letter by itself however is in the opinion of the Committee conclusive as showing that, so long as present conditions and current views upon taxation are in force, no good result could reasonably be expected from further representations to Government. This was frankly recognised by the Agent of an up-country mill who addressed the Committee, and to whom the Committee, in replying, sent a copy of the letter in question.

The Managing Director of the Muir Mills Company, Ltd., at Cawnpore, although at that time not a member of the Association, addressed the Committee on the 24th February 1903 in this matter, and forwarded a copy of a letter which he had sent to the various weaving mills in India. In this letter it was asserted that the Excise duties were condemned in **Lancashire** as unjust and as in no way beneficial to British Industry. It was therefore suggested that the time was suitable for an agitation in England; and the writer proposed that a strong deputation from Indian weaving mills should be sent to England to address public meetings and to approach both the Secretary of State and Parliament.

In the covering letter to the Committee it was proposed that the Viceroy should first be approached.

It was understood that the Agent of the Muir Mills had also written to the press in England on the same subject, but that the reception of his proposals in that quarter had not borne out his view of the state of public opinion in Lancashire.

The Committee, with their reply, dated 9th March 1903, forwarded a copy of the letter of Government quoted above, and pointed out that, in view of its terms, no reasonable hope could be entertained of a satisfactory result from any representations to Government. They expressed their willingness to consider the expediency of an effort to be made in England, and to this end invited the Managing Director of the Muir Mills to visit Bombay and meet the Committee.

Allusion was also made to the fact that, in this as in many other matters affecting the interests of the Industry throughout India, the Association had made great efforts in which they had not always felt that they received from persons whose interests were affected that practical support which they would have looked for. It was pointed out that the usefulness of such an Association was in some degree limited by the extent to which its membership included every considerable Company engaged in the spinning and weaving of cotton, and even by the amount of funds at its disposal. It was added that the absence of the Muir Mills from the list of members was therefore a matter of regret and that in the circumstances it placed the Committee in a position of some difficulty.

The Managing Director of the Muir Mills replied on the 17th of March, acknowledging receipt of the Committee's letter and enclosure, and stating at once his opinion that the cotton mill industry in India should recognise that the imposition of the cotton Excise duties could not justly be described as a tax imposed on local industries at the mandate of Lancashire. He considered that, though the real object of the duties was obscured at the outset, it was now clear that cotton Import duties were a part of the fiscal policy of the Indian Government. He added that, this being so, there *must* be Excise duties or otherwise the doctrine of free-trade would be violated. Reference was made to the existence of similar duties and excise in Egypt; and the writer then proceeded to propose that Import and Excise duties should simultaneously be abolished in India and the loss of revenue recouped by a tax upon railway passengers.

He added that he hoped to meet the Committee on his way home some months later, and concluded with a request to be enrolled among the members of the Association.

The Committee, while unable to adopt his suggestion as to the tax upon railway passengers, expressed the hope of seeing him on his way home.

In acknowledging the receipt of this letter on the 9th April, the Managing Director of the Muir Mills stated that he had received copies of Lancashire papers showing the view taken in that centre regarding the proposals made by him and demonstrating the small likelihood that existed of any successful movement at home for the abolition of all the duties. The attitude of Government towards any such movement was also clearly indicated by the reply made by the Secretary of State for India to Mr. Emmott in Parliament.* He therefore desired to revert to his original proposal for the abolition of the Excise duties alone ; but the Committee could only reply that, in view of the categorical reply of Government in May 1901, they could not think that any good result would attend an effort in the direction suggested.

About the same time a letter was received from another up-country Mill, also not a member, supporting the opinion of the Managing Director of the Muir Mills, and urging that the Association should adopt it ; but a reply in terms similar to those used in the case of the Muir Mills was made.

The Managing Director of the Muir Mills renewed his representations to the Association in the end of October, and at that date forwarded a copy of a letter he had addressed to all Cotton Mills and to the Press on the subjects of the Excise Duties and the **Returns of Production** required by the Government of India. In respect of the first of these two questions, the arguments used were much on the lines of those formerly employed ; and in regard to the Returns of Productions it was contended that they entailed useless trouble on the industry and disclosed to competitors the details of India's requirements.

Allusion was made to a correspondence which the writer had had with the Association in August, and from which it had issued that no such returns were required by Government from Mills in England. This correspondence will be found in that section of the report which relates to Statistical Returns of Spinning and Weaving.

The letter of the 27th October was followed by one of the 3rd November in which the Managing Director of the Muir Mills pressed upon the Association the importance of convening a meeting of representatives of all the Mills in India not later than the cold weather.

The Committee, in their reply, dated the 9th November, stated that they were not satisfied that the abolition of the Returns of Production was intrinsically desirable. It was admitted that they entailed some trouble on Millowners ; but it was believed that the statistics so constituted were more valuable to persons and bodies who, like the Association, were concerned with the study of Indian Industry than they could possibly be to any foreign competitor. It was pointed

* The text of the reply alluded to, as given in the *Times* of the 31st March 1903, was as follows :—

"Lord George Hamilton said :—'As I stated in answer to a similar question on March 12th I cannot hold out any hope at present of reducing the Customs duties now in force in India. The Government of India have gone as far as they consider prudent at present in remitting taxation. Since 1895 the duty on woven Cotton Goods has been reduced from 5 per cent. to 3½ per cent., the duty on yarns entirely taken off, and the countervailing excise duty on Cotton Goods woven in India power Mills has been re-adjusted so as to prevent the Import duty from having a protective effect. These changes materially modify the character, incidence and scope of the duties existing in 1895.'" See also *Times* of 10th February 1904. Lord George Hamilton on Fiscal Policy, page 11. See also *Financial Statement* for 1904-05, para. 62.

out that the Committee's view was not formed without considerable experience of what was necessary to the study and to the representation to Government of questions relating to the industry ; and it was added that while the Committee wished that similar statistics relating to the production of the United Kingdom were available, they did not understand that any serious proposal had been made that the institution of a similar system of returns in the United Kingdom should be demanded by Indian Millowners.

With regard to the Excise question, the Committee stated that it was only with extreme reluctance that they had decided not to move at that time. It could not be supposed that the Millowners of Bombay were less concerned than others to obtain the removal of the duties, and the Committee watched attentively for any opportunity of raising the question effectively. But, on the one hand, they would be sorry to move without some apparent prospect of success ; and, on the other hand, they were unable to discover in the well-founded concensus of opinion among Millowners any grounds for hoping that Government would, in deference to such opinion, depart from the principle laid down so explicitly in the letter of which a copy had been already forwarded.

In reply to a further letter from the Krishna Mills at Beawar, who had meantime become members and who pressed the Association to act as suggested by the Managing Director of the Muir Mills, the Committee expressed their regret that, in the face of the extremely explicit statement of Government, they could not but feel sure that any agitation in the direction suggested would be fruitless and would therefore do nothing but injure the usefulness of the Association in other directions.

In a long letter, dated the 22nd November, the Managing Director of the Muir Mills took exception to the conclusions of the Association, and followed it up by one dated the 2nd December, in which he proposed as a further subject of discussion an amendment of the Merchandise Marks Act under which the actual average count of yarn spun must not be more than a quarter of a count higher or lower than the declared count. It was inferred from this that the question of short reeling, in the official settlement of which the Association had been formally concerned for some time, was exciting interest in Cawnpore. About the end of the year, the Committee received from their correspondent an offer to come to Bombay if there was any likelihood of their adopting his suggestion for a meeting of representatives of all the Indian Mills. A telegram proposing the 2nd or 3rd of January followed. One of these dates was unfortunately a Sunday and the other a holiday ; and, as a number of members were away at that time, it was in the end found necessary to telegraph that it was impossible to arrange for a meeting at that season of the year. The correspondence will be found in the appendices.

It only remains to be stated that in the middle of the year the Committee received from the **Cotton Employers' Parliamentary Association and the United Textile Factory Workers' Association** a joint letter inviting the Association to co-operate with them in an organised attempt to procure the removal both of the Import and Excise Duties on cotton goods. The Committee would have welcomed any opportunity of co-operation on really common ground with the bodies in question ; but, while they for the time being allowed their

attitude in the matter to be governed by the explicit declaration of Government that all the duties must co-exist, they were not prepared definitely to abandon or prejudice their right to contend at a more fitting time for the abolition of the Excise Duties on cotton textiles and the maintenance of the Import Duties for revenue purposes. They, therefore, replied that the expediency of taking early action for the abolition of the duties had recently been considered by the Committee with great fulness, and that they had come to the conclusion that no good result would attend such action.

Members must be aware that the general principles to govern the fiscal relations of India to other parts of the British Empire are now being considered in connexion with the large issues raised by Mr. Chamberlain; and, seeing that the fate of the Cotton Duties must to some extent be determined by the final decision in respect of these general principles, it would certainly have been useless to take any such action as has been repeatedly pressed upon the Committee from various quarters during the past year. It is probable that in the discussion of the issues in question an opportunity will occur for advocating afresh those principles which the Association has consistently upheld; and such an opportunity will be attentively watched for and at once seized. (*Appendix* **O.**)

COTTON DUTIES ACT.

(EXCISE DUTY ON THE CALENDERED VALUE OF CLOTH.)

(See *Association's Reports*, 1900, *pp.* 4 and 26; 1901, *p.* 20.)

On the 10th of April 1903, a member, who had recently joined, and who had therefore presumably not seen the past Reports of the Proceedings of the Association in past years, wrote to enquire whether the Committee considered that the assessment of cotton cloths to an enhanced duty if they are bleached, calendered, printed, or dyed, was legal under the Cotton Duties Act.

The Committee replied that the Section of the Cotton Duties Act which governed the incidence of excise duty on all cotton cloths issuing from an Indian mill was as follows :—

"There shall be levied and collected at every mill in British India, upon all cotton goods produced in such mill, a duty at the rate of 3½ per centum on the value of such goods."

"*Explanation.*—Goods are said to be produced within the meaning of this Section when they are issued out of the premises of the mill. But, in the case of any mill in which the goods are chiefly and/or largely made up and sold otherwise than as piece-goods, the Governor-General in Council may direct that the goods shall be reckoned as produced when they are issued out of the weaving section or sections of the mill."

The Committee therefore stated that in their opinion there could be no doubt that the assessment of the duty upon the market value of a cloth as it issues from the mill was in accordance with the law as above laid down.

With reference to a supplementary paragraph in which the member in question referred to the anomaly, whereby cloths calendered within mill limits were subject to a duty not incurred when the calendering was done outside, it

was mentioned that the matter had been discussed by the Association with Government and that it was hoped that an arrangement would be made for the waiver of such extra duty when the calendering department of a mill has been isolated from the rest of the mill to the satisfaction of the authority. In such cases cloth would, for assessment purposes, be taken as issuing from the mill at the time of its passing to the calendering department.

In the Report of the Association for 1900, to which reference is given above, will be found the text of certain proposals which Mr. O'Conor, then Director-General of Statistics, agreed, after formal consultation with a deputation of this Association, to recommend to Government in this matter.

Seeing that more than three years had passed without any intimation having been received from Government of the orders issued in pursuance of that arrangement, the Association on the 8th March 1904 addressed a letter of enquiry to the Collector of Bombay. They were informed in reply that orders on the subject had been issued by Government and had been in possession of the Department since February 1901. Considering the formal manner in which this question had been discussed and the known interest of the Association in its settlement, the Committee thought it necessary to bring the case to the knowledge of Government, and accordingly forwarded a copy of the correspondence with a request that arrangements might be made to avoid a repetition of such oversights. (*Appendix* **P.**)

ANNUAL REVISION OF TARIFF VALUES UNDER THE COTTON DUTIES ACT.

Mr. J. A. Robertson, Director-General of Statistics, Government of India, visited Bombay in the early part of December 1903, in connection with the above matter. As on previous occasions a Sub-Committee, consisting of Messrs. Sassoon J. David, N. N. Wadia, W. H. Brady, Gordhandas Khattau and the Hon'ble Mr. Vithaldas Damoder Thackersey, was appointed to represent the Association, and a meeting with Mr. Robertson was accordingly arranged, and took place in the Custom House on Friday, 4th December 1903, at 2 p.m.

The Tariff Schedule, embodying the alterations in classification and in prices which had been prepared by Mr. Robertson, in conjunction with the local authorities, was discussed *seriatim;* and it was agreed that the values proposed by Mr. Robertson should, with certain modifications, be submitted to the Government of India for adoption.

Under date 18th December 1903, the following Notification (No. 7778-S. R.), was published by the Government of India, containing the revised tariff values :—

" In exercise of the power conferred by Section 7 of the Cotton Duties Act, 1896 (II of 1896), and in supersession of the Notification in this Department, No. 6948-S.R., dated the 29th December 1902, the Governor-General in Council is pleased to fix, for the descriptions of cotton goods hereunder specified, tariff values as follows with effect from the 1st January 1904 :—

	Grey goods, plain or bordered.	Tariff value per lb. A.	p.
1.	Blankets and blanketings, raised	8	0
2.	Chadars and bedsheet, plain, or with borders, not over $\frac{1}{4}$"	7	0
3.	Dangari cloth	7	3
4.	Dhutis, cholas, dupattas, and lungis, plain or with borders, not over $\frac{1}{4}$"	7	6
5.	" " " " " " " " " over $\frac{1}{4}$" but not over $1\frac{1}{2}$"	8	0
6.	Dhutis and patals with headings over 4" wide and coloured borders ...	9	0
7.	Domestics, T cloths, shirtings, longcloth, sheetings with borders not over $\frac{1}{4}$"	7	3
8.	Drills and jeans, plain	7	3
9.	Fents	6	3
10.	Printers	7	6
11.	" (bhagavad)	7	3
12.	Shirtings, twilled, unbleached	9	0
13.	" " bleached	10	0
14.	Tent, sail, commissariat, and double cloth (dosuti)	6	9
15.	Zanzibar cloth, including American cloth	7	0

" Provided that for calendered grey goods 3 pies shall be added to the above values.

	Figured or coloured goods.	Tariff value per lb. A.	p.
16.	Bed-covers, quilts, twilled sheets, twilled chadars, and table cloths, with borders not over $\frac{1}{4}$"	7	6
17.	" " " " " " coloured warp or weft ...	8	6
18.	" " " " " " " and weft ...	9	6
19.	Bed ticking, plain or drilled	9	0
20.	Chadars, twilled, coloured (shawl checks)	12	9
21.	" not twilled, coloured, calico wove, shawl pattern	10	3
22.	Cholis and saris (coloured)...	11	3
23.	Cotton tweed, commonly called hunting cloth, plain or striped, including leheria, Thana susi, Thana twill, and Thana check ...	10	3
24.	Other cotton tweeds and English checks, trouserings and coatings ...	10	6
25.	Drills and jeans, striped	8	6
26.	" " " checked	9	3
27.	Fents	7	3
28.	Lungis, unbleached, coloured stripes and borders	8	6
29.	" coloured	10	6
30.	Madras cloth	9	6
31.	" " (imitation)	9	3
32.	" " twilled, checked, coloured warp and weft	9	9
33.	" " handkerchiefs or lungis	12	3
34.	Napkins, unbleached	8	0
35.	" bleached	9	0
36.	Susi, ordinary, coloured stripes, grey ground	8	6
37.	" " " weft	9	0
38.	Ordinary susi checks, grey ground	9	6
39.	" " " coloured warp or weft	9	9
40.	Fancy dobby pattern checks, coloured warp and weft	10	9
41.	Flannel pattern susi and dobby susi, grey weft	9	0
42.	" " " " " " coloured weft	9	6
43.	Towels, Turkish, unbleached	9	0
44.	" " bleached	10	0
45.	" " honeycomb, unbleached	7	9
46.	" " " bleached	8	9
47.	Zephyr cloth	9	3
48.	" " striped and checked	10	9

"Provided that any goods specified in the foregoing lists shall, when woven with borders of silk, be assessed to duty *ad valorem*."

ALLEGED SHORT REELING OF YARN IN INDIAN MILLS.

(See *Report for* 1902, *page* 11.)

Reference should be made to the Report for 1902 for a record of the earlier phases of the movement for the prevention of deliberate short reeling of yarn in Indian Mills for sale in India. That record closed with the papers of which copies had been kindly furnished by the Bombay Chamber of Commerce and which included a note of the results found in the tests made of various yarns submitted by the District Magistrate and Inspector of Factories at Sholapur for examination. It will be remembered that shortly before the receipt of those papers the Association had, on the invitation of Government, submitted certain representations as to the extreme difficulty of legislating on the point. This letter was dated the 27th October 1902, and nothing further was heard officially in the matter till the beginning of September 1903, when the Government of India, by letter dated the 4th September, intimated that **Government had decided** to take measures to stop the practice alluded to and considered that prosecutions should be instituted against persons who intentionally practised such short reeling. It was stated that Government desired to avoid interference with the trade in yarn manufactured for export, and thought it necessary to draw up very precise instructions for the guidance of Inspectors by whom those prosecutions would be instituted, defining accurately the class of cases in which proceedings should be taken and indicating the method by which such cases should be investigated. The Government of India accordingly proposed to appoint a small Committee, of which the Commissioner of Customs, Bombay, would be Chairman, to consider the question in detail and to frame the necessary instructions.

The Association were invited to nominate a representative to sit on this Government Committee, which, it was mentioned, should meet on the 1st of October.

Mr. Sassoon J. David, the Vice-Chairman of the Association, was appointed to represent it on the Committee, which was constituted by Resolution of the Government of India, Finance and Commerce Department (Statistics and Commerce), No. 5800 S. R., dated the 24th September 1904, and consisted of the following members :—

Mr. J. L. Jenkins, I.C.S., Commissioner of Customs, Salt, Opium and Abkari, and Reporter-General of External Commerce, Bombay.	*Chairman.*
Mr. R. E. Enthoven, I.C.S., Officiating Director-General of Statistics.	*Members.*
Mr. C. H. Armstrong, Representative of the Bombay Chamber of Commerce.	
Mr. S. J. David, Representative of the Bombay Millowners' Association.	
Mr. L. B. Ker, Representative of the Karachi Chamber of Commerce.	
Mr. L. N. Hartley, Presidency Inspector of Factories, Bombay	*Secretary.*

A Special Meeting of the Committee of the Association was held on the 24th September for preliminary discussion of the question, and Mr. C. H. Armstrong, who had been appointed by the Chamber of Commerce to represent that body on the Government Committee, was present at that meeting on invitation.

After a protracted sitting it was resolved that Mr. David be instructed to advocate with Government the following principles :—

(*a*) That **prosecutions** should be undertaken only in respect of goods found exposed or held for sale in an Indian Market, or passing through the Custom House for delivery in an Indian Market, and that no seizure or examination of goods for the purpose of such prosecution should take place in a mill or factory except it were a mill or factory from which goods are sometimes issued otherwise than properly bundled.

(*b*) That all goods intended for export to a foreign market should have attached to them, before issue from the original place of manufacture, a ticket or tickets prominently displayed, and on which the words "**for export**" are legibly shown alone or in combination with a trade mark, and that a similar ticket should be enclosed in each bundle of such goods.

(*c*) That goods bearing tickets so marked should be exempt from examination in the Custom House when passing through under shipping documents for a foreign port.

(*d*) That goods bearing tickets so marked should be examined and tested when they are found exposed or held for sale in an Indian Market.

(*e*) That it should be within the discretion of an Inspector to examine and test any yarn found exposed or held for sale in an Indian Market.

(*f*) That should goods **marked "for export"** be exposed or held for sale in an **Indian Market,** and, on examination, be found to be short-reeled, the person so holding or exposing them should be solely responsible, and no responsibility should attach to the manufacturer so long as it is not shown that the words "for export" were not duly affixed before the goods were issued from his control.

(*g*) That if goods **not so marked** but which are exposed or held for sale in an **Indian Market** are, on examination, found to be short-reeled, the responsibility should be with the manufacturer.

(*h*) That steps should be taken to procure the effective adoption of similar rules by the various **Native States,** and that Native States not effectively adopting such rules should be regarded as foreign markets within the meaning of these rules.

The Government Committee met frequently in October; and when their report had been drafted in a sense largely opposed to the recommendations of the Association, a **Special Meeting** of the Committee was, at the request of Mr. David, called for Friday, the 23rd October, to consider its terms.

On that date the Committee settled the general principles on which they were to suggest certain amendments through their representative, and the meeting was then adjourned till Monday, the 26th October, when certain specific amendments were drafted and communicated to Mr. David with a cordial vote of thanks for his labours.

The amendments in question will be found in the Appendix, preceded by a reprint of those sections in the existing law to which the proposals of Government relate and which will be affected by those proposals. Roughly, it may be said that the purpose of all the amendments was (*a*) to exempt effectually such yarns as are destined for export, or have been sent out by a weaving mill to be dyed for its own use, or have been made up in cops, bobbins or tubes; (*b*) to protect a manufacturer from responsibility at law for the act of a dealer who may have sold in an Indian Market goods delivered to him by such merchant for export; (*c*) to prevent the visitation of mills by Inspectors, seeing that in the mill it would be impossible to ascertain whether certain goods were or were not destined for export.

The representative of the Association was unable to procure the acceptance of any of these amendments, except one or two merely verbal corrections or alterations. He, therefore, in signing the Report of the Government Committee, forwarded a **minute of dissent** which will be found with the other papers among the Appendices. Many of the points debated were of a slightly intricate kind; and it would be undesirable to attempt any summary of arguments which in the original documents were stated with the utmost succinctness and brevity consistent with clearness. By direction of the Committee, the whole set of papers were printed and issued to the Members for their information in November.

No official announcement has been made regarding legislation about to be undertaken on the subject; but it is understood, on good authority, that the matter is engaging the immediate attention of Government.* (*Appendix* **Q.**)

IMPROVEMENT OF INDIAN COTTON.

An interesting and important "Note" on the experiments made during the year in the improvement of Indian cotton was published by the Inspector-General of Agriculture in India in August 1903, and will be found among the appendices to this Report. The Association is indebted to the Committee of the Bombay Chamber of Commerce for calling its attention to this "Note" and also to the photographs of various staples which accompanied it. (*Appendix* **R.**)

These photographs are preserved in the Association for reference.

PROPOSED OFFICIAL REGISTRATION OF TRADE-MARKS.

(See *Association's Report for* 1879, *pp.* 19 *and* 73.)

In 1877 the Committee of this Association represented to Government that it would be expedient to institute in India a system of Registration of Trade-Marks similar to that existing in the United Kingdom. Unfortunately the issue of Reports of the Association about 1877 would not appear to have been conducted in a regular manner. Some of them relate to periods of twelve months; but several of them deal with periods of much greater length, while in the case

* At the meeting of Committee at which this Report was approved, it was stated that certain papers in this matter had recently been referred by Government to the Chamber of Commerce for opinion. The Committee have accordingly applied to Government for copies of the said papers.

of this particular year 1877, there does not appear to have been any Report made. Nor does the next Report entitled "Report for the *period* ending 31st October 1878" contain any reference to the Trade-Marks question. In that for the *year* ending 31st October 1879, however, there is a brief reference to the fact that recommendations had been made by the Association in 1877, and a note on the criticisms offered concerning the Draft Bill, the text of which was printed in the Appendices.

In September 1903, the question was re-opened by the Government of India, which addressed a letter with accompaniments to all the Provincial Governments and directed them to consult the various Commercial Associations as to the expediency of instituting in India such a system of Registration as had formerly been contemplated. In the opening paragraphs of this letter allusion was made to the facts that this Association had raised the question in 1877 and that the Bill prepared at their instance had subsequently been withdrawn on the recommendations of the Association and of the Chamber of Commerce.

It had been known that for something like two years there had been a growing movement in the United Kingdom in favour of the establishment of some form of Trade-Marks Registration in India; and printed matter on the subject which had come to the Association from various sources had made it evident that those most active in the movement had an imperfect appreciation of the difficulties to be encountered.

The matter, however, is one the importance of which is kept constantly before your Committee by the numerous questions that arise in the re-organization of the Association's private Register of Trade-Marks; and the fresh proposals were considered on their own merits without regard to the circumstance that they had formerly been considered impracticable.

They were, however, forced to the conclusion that such legislation as was proposed was neither necessary nor desirable. They were aware that the effective registration of certain classes of Trade-Marks in the United Kingdom had become a matter of extreme difficulty; and they believed that in India a similar system would be impracticable and, if practicable, injurious. The Indian Merchandise Marks Act in principle does all that law can do for the protection of Trade-Marks in a continent so large as India; and it was the opinion of the Committee that what dissatisfaction exists in the matter is due to the slowness and costliness of litigation which, under any Act, would presumably be necessary, in the last resort, for the establishment of a right of user. The injury done either to buyer or manufacturer by a counterfeit mark depends in reality on the simple question of whether the counterfeit does in fact lead the buyer to suppose that he is getting what he is not getting. Under the Merchandise Marks Act, a merchant or manufacturer can protect his mark in a particular market if he can show that in that market it is regarded as distinguishing his goods. The Committee in their reply, dated 12th November, represented to Government that no system of registration in Calcutta or elsewhere could affect such a simple question of fact or justify the disregard of it. And they added that, so far from believing that any system of registration would simplify, expedite or obviate litigation in con-

nection with Trade-Marks, they would rather expect the effect of legislation on the lines suggested to be a considerable increase in the number and complexity of the cases to be tried and the obscuration of the fundamental principle stated. (*Appendix* **S.**)

CHINA TRADE AND THE ABOLITION OF THE *LIKIN.*

(SIR ERNEST SATOW, HIS MAJESTY'S MINISTER AT PEKIN, ADDRESSES A PUBLIC MEETING UNDER THE AUSPICES OF THE ASSOCIATION.)

(See *Association's Report for* 1902, *page* 96.)

In the month of June 1903, it became known that Sir Ernest Satow, His Imperial Majesty's Minister at Pekin, would pass through Bombay about the first week in July on his way from Europe to resume his appointment. The Vice-Chairman, in a letter dated the 23rd June, suggested that arrangements should, if possible, be made for a conference with him on the subject of China Trade and the new Treaties (*see* Association's Report for 1902, pages 29 and 83). A telegram was accordingly despatched to him at Aden, expressing the desire of the Association for the honour of a conference on Monday, the 6th July, or other suitable day. Sir Ernest Satow was good enough to consent and to appoint the afternoon of Friday, the 3rd July, on the morning of which he was to arrive. Invitations were immediately issued to all leading members of the commercial community and a large and representative meeting resulted.

Owing to the necessity for consulting the Solicitors to the Association about certain legal questions that arose in connection with the general revision of the Rules of the Association, the Annual General Meeting last year was not held till the 24th of June; and it was therefore possible to print in the Appendices to the Report for 1902 the Press Report of the large public meeting which had the advantage of hearing Sir Ernest Satow on a subject of the utmost importance to the industry. As the Report had, however, already been adopted, it was not permissible to insert in it any reference to the meeting in question, and it is now only necessary to record the fact that the said meeting belongs strictly to the proceedings of the past twelve months.

INDUSTRIAL AND ARTS EXHIBITION, 1903, MADRAS.

The above exhibition was open on the 18th December 1903 and continued open every day till the 6th January 1904. Circulars and copies of rules for the guidance of exhibitors were received from the Exhibition Committee in October and distributed among members of the Association as desired.

OFFICE ORGANIZATION.

Under date 19th November 1903, a communication was received from the Bombay Chamber of Commerce, enquiring whether the Committee would have any objection to an arrangement whereby the secretarial work of the various Associations seated in the Chamber's office should be centred, as is done in Calcutta, under the control of the person acting as Secretary of the Chamber of Commerce, the Chamber undertaking the maintenance of the office and necessary staff in return for a round monthly payment, while stationery, printing, and other current expenses should be paid by the Association. It was pointed out that the Bombay Cotton Trade Association had already come to a similar arrangement.

On receipt of the above communication a Sub-Committee, consisting of the Chairman, Mr. N. N. Wadia, Mr. Manmohandas Ramji, and Mr. Narandas Purshotamdas, was appointed to meet a Sub-Committee of the Chamber for the purpose of discussing the details of the scheme. The joint Sub-Committee met on 14th December 1903, when the following arrangements were arrived at as commencing from 1st January 1904:—

(*a*) That the arrangements should be terminable by either party at one month's notice.

(*b*) That while it was not possible to bind the Chamber to any arrangement whereby, in the event of the Secretaryship falling vacant, they should be compelled to refer formally to the Millowners' Association before making an appointment, it was obvious in view of (*a*) that it would not be to the interests of either Association to seek to make any such appointment as might lead to the termination of the arrangement.

(*c*) That should the amalgamation proposed result in a reduction of the staff engaged in the business of the Millowners' Association, the Millowners' Association will be allowed the benefit of such saving as may be effected.

It was agreed further that the Clerk engaged in the Registration of Trademarks should be paid by the Association direct.

NEW MARKETS FOR BOMBAY COTTON GOODS.

SHIPMENTS OF YARN TO THE LEVANT.

(*See Report of the Association for* 1901, *page* 7.)

It will be remembered that in 1901 the Secretary of the Association inaugurated a systematic effort to open up new markets for Bombay yarns, and that the Levant was one of the fields to which special attention was given. Since that time the project has been steadily pursued, and every effort has been made to keep the Association in touch with those places. It is most satisfactory to record that the result has more than fulfilled expectations, and that shipments of yarn from Bombay to ports in the Levant have increased in a quite remarkable manner. In 1901-02 the entire shipments to those ports amounted to only 444,145 lbs.; but in response to the first efforts of the Association this figure was in the following year almost trebled, the exact quantity exported being 1,215,476 lbs. In the past year the development has been even more striking. Unfortunately the figures for the last quarter of the official year just closed are not available; but in the nine months ending 31st December 1903, the total amounted to 1,960,410 lbs. or about four and-a-half times the quantity shipped in the whole twelve months two years ago and some 61 per cent. more than in the twelve months immediately preceding. There is therefore no reason to doubt that in two years' time Bombay's yarn trade with the Levant has been multiplied by six. The fact is a clear indication of what can be done by systematic study of a foreign market and of the valuable services of a very practical nature that are rendered by the Association to its members.

CHANGES IN COMMITTEE.

Mr. John R. Greaves, who was re-elected Chairman of the Association for the year 1903, resigned office in March and proceeded to Europe in the same month. The Committee conveyed to Mr. Greaves the expression of the regret with which they were obliged to accept his resignation and had learned that it was due to indisposition. They also expressed their cordial thanks for his able conduct as Chairman since June 1900, and their equally cordial hope that Mr. Greaves might be fully restored to health. The vacancy of Chairman, which was thus created, was subsequently filled by the appointment of Mr. Bomonjee Dinshaw Petit, the Deputy Chairman. Mr. Sassoon J. David, a member of the Committee, was at the same time appointed to succeed Mr. Bomonjee as Deputy Chairman. Mr. C. N. Wadia also retired from the Committee on leaving for England about the same time, and was succeeded by Mr. N. N. Wadia. On the former's return to Bombay, however, the Committee—in order to complete the total number of members prescribed by the Rules—invited Mr. Wadia to re-join, and this he was good enough to do. Mr. Goculdas Naranjee left Bombay in October for upcountry, and as his absence was likely to be prolonged, he tendered his resignation which the Committee, under the circumstances, accepted, and appointed Mr. Narandas Purshotum to fill the vacancy. Mr. D. J. Tata also resigned office during the year and was succeeded by Mr. N. B. Saklatwala.

HOLIDAYS FOR 1904.

The Committee have, as in previous years, furnished members with a list of the holidays recommended to be observed by the Cotton Spinning and Weaving Mills during 1904.

STOCKS OF COTTON IN BOMBAY.

In accordance with the practice observed in previous years, the Committee after obtaining returns from agents and owners, informed the members, by a circular in the usual way, that the total quantity of cotton held by the Spinning and Weaving Mills in Bombay on 30th June 1903 was 96,539 candies.

STATISTICS.

The usual comparative statements are published in the Appendix showing the imports and exports of piece-goods and yarns for a series of years, together with the annual statement of Cotton Spinning and Weaving Mills working and in course of erection in India on 30th June 1903. The members of the Association have been regularly supplied during the year with the monthly statistical returns published by the Committee, together with the weekly list of quotations of piece-goods and yarn. (*Appendix* **T.**)

BOMBAY ASSOCIATION OF FIRE INSURANCE AGENTS.

CIRCULARS AFFECTING MILLS.

Copies of circulars issued by the above Association in connection with Fire-Extinguishing Appliances at Cotton Mills and other risks have been regularly supplied to members of the Bombay Millowners' Association during the year. They are also filed in the records of the Association.

APPENDIX A.

BALANCE SHEET OF THE BOMBAY MILLOWNERS' ASSOCIATION.

From 1st January to 31st December 1903.

	Rs. a. p.	Rs. a. p.		Rs. a. p.	Rs. a. p.
To Office rent	720 0 0		By Balance at the credit of the Association on 31st December 1902 :—		
„ Office Salaries	5,181 10 8				
„ Printing	2,106 12 0		General Fund	41,351 15 11	
„ Advertisements	242 12 0				
„ Miscellaneous Expenses, Stationery, &c.	546 10 3		Travelling Agency Fund	3,758 13 7	
„ Association's contribution to the Chamber of Commerce Statistical Department	1,200 0 0				45,110 13 6
„ Auditor's Fee	100 0 0		„ Subscriptions for the year ending 31st December 1902	13,517 8 8	
„ Law charges...	365 5 0		„ Miscellaneous Receipts	200 8 0	
„ Telegram charges	70 2 0		„ Interest on Government Paper and Fixed Deposits of General Fund and Travelling Agency Fund	1,500 8 6	
		10,533 3 11	„ Arbitration Fee Account	5 0 0	
„ Association's contribution to the Victoria Jubilee Technical Institute for 1903-04	.....	3,000 0 0			15,223 9 2
„ Association contribution to Sir J. J. Hospital Nursing Fund ...	.....	500 0 0			
Balance as under :—					
Government 3½ per cent. Promissory Notes for Rs. 14,000—Cost.	14,251 14 0				
Fixed deposit with the Yokohama Specie Bank, Ld., for 12 months at 5 per cent.	13,500 0 0				
Fixed deposit with the National Bank of India, Ld., for 12 months at 4 per cent	5,000 0 0				
Cash in the Bank of Bombay	9,000 15 2				
Cash in hand	169 9 10				
Interest not recovered on Rs. 14,000 3½ per cent. Government Paper	1,188 1 7				
Subscription from members due, but not recovered	370 4 5				
	43,480 13 0				
Less—Amount due for wages for December and Auditor's Fee.	1,038 12 6				
		42,442 0 6			
Government 3½ per cent. Promissory Notes for Rs. 3,000 of Travelling Agency Fund Account—Cost	2,934 6 0				
Interest on Rs. 3,000 Government Paper not recovered	300 14 0				
Cash in the Bank of Bombay, Travelling Agency Account ...	623 14 3				
		3,859 2 3			
Total Rupees ...		60,334 6 8	Total Rupees ...		60,334 6 8

Examined and found correct.

NESSERWANJEE SORABJEE JAMSETJEE,
Auditor

FREDERICK NOEL-PATON,
Secretary.

Bombay, 29th March 1904.

Appendix B.

Government Statistics.

MONTHLY RETURN OF COTTON SPINNING AND WEAVING MILLS IN INDIA.

MILLOWNERS' ASSOCIATION,
BOMBAY, 10*th June* 1903.

THE DIRECTOR-GENERAL OF STATISTICS,
GOVERNMENT OF INDIA,
CALCUTTA.

SIR,

Under the instructions of the Committee of the Bombay Millowners' Association I have the honour to call your attention to the monthly return published by your Department giving "Statistics of Cotton Spinning and Weaving in the Indian Mills." Statement No. 3, page 3, gives details of the quantity and counts of yarn spun by all the mills in the Bombay Presidency; and, similarly, Statement No. 5, page 11, shows the outturn of all woven goods. There cannot be the least doubt as to the utility of the return. But it has been represented to the Committee that, in view of the fact that by far the largest number of cotton spinning and weaving mills are situated in Bombay Island and Ahmedabad, it would be a great convenience to millowners, for purposes of statistical reference, were separate tables showing details of yarn production given, one for Bombay Island and the other for Ahmedabad. Similarly, separate tables for cloth also for the two cities. To be precise, after the General Table 3, for yarn produced in the Bombay Presidency, there should be two letters, namely, 3 (A) and 3 (B), for yarn production in the Bombay Island and Ahmedabad, respectively. Similarly, after Table 5, for cloth woven in the Bombay Presidency, there should be two tables, namely, 5 (A) and 5 (B), for the identical places.

The Committee feel confident that you will not fail to comply with their suggestion, specially having regard to the fact that such separate returns are, they understand, monthly furnished to your department by the offices of the Collectors of Bombay and Ahmedabad. Thus it will entail no fresh trouble on your department, while the Committee will be able to get what it wants. Trusting that you will kindly give effect to this suggestion, commencing from the current official year,

I have, &c.,
C. J. MICHAEL,
for Secretary.

GOVERNMENT OF INDIA,
STATISTICAL DEPARTMENT,
CALCUTTA, 17*th June* 1903.

No. 1256.

FROM
THE DIRECTOR-GENERAL OF STATISTICS;

TO
THE SECRETARY,
MILLOWNERS' ASSOCIATION,
BOMBAY.

SIR,

I have the honour to acknowledge the receipt of your letter of the 10th instant, proposing that two separate tables showing details of cotton yarn and goods produced in the mills located in Bombay Island and Ahmedabad may be inserted in the monthly accounts of cotton spinning and weaving in the Indian mills.

2. I beg to say that the proposal is under consideration, and that I hope to be able to comply with your suggestion.

I have, &c.,
J. A. ROBERTSON,
Offg. Director-General of Statistics.

GOVERNMENT OF INDIA,
STATISTICAL DEPARTMENT,
CALCUTTA, *4th August* 1903.

No. 1601.

FROM

THE DIRECTOR-GENERAL OF STATISTICS;

TO

THE SECRETARY,
MILLOWNERS' ASSOCIATION,
BOMBAY.

SIR,

In continuation of Mr. Robertson's letter No. 1256, dated the 17th June 1903, I have the honour to enclose a copy of the statistics of cotton spinning and weaving in the Indian mills in April 1903, in which four additional tables have been inserted with separate figures for Bombay and Ahmedabad as suggested in your letter of the 10th June.

2. I beg to add that, in the table for Ahmedabad, statistics for all the mills in the mofussil for the corresponding months of 1901 and 1902 have been inserted with a footnote explaining this fact, previous figures for Ahmedabad only not being readily available.

I have, &c.,
R. E. ENTHOVEN,
Offg. Director-General of Statistics.

MILLOWNERS' ASSOCIATION,
BOMBAY, *20th August* 1903.

THE DIRECTOR-GENERAL OF STATISTICS,
GOVERNMENT OF INDIA,
CALCUTTA.

SIR,

I have the honour, by direction, to acknowledge the receipt of your letter No. 1601 of the 4th instant, and to convey to you the thanks of the Committee of the Bombay Millowners' Association for your compliance with their suggestion in the matter of the monthly tables, published by your Department, showing the statistics of cotton spinning and weaving in the Indian mills.

I have, &c.,
FREDERICK NOEL-PATON,
Secretary.

GOVERNMENT OF INDIA,
STATISTICAL DEPARTMENT,
CALCUTTA, *8th October* 1903.

No. 2040.

FROM

THE DIRECTOR-GENERAL OF STATISTICS;

TO

THE SECRETARY,
MILLOWNERS' ASSOCIATION,
BOMBAY.

SIR,

I have the honour to acknowledge the receipt of your letter of the 20th August 1903, and, with reference to paragraph 2 of my letter No. 1601, dated the 4th idem, to state that statistics for the cotton mills located at Ahmedabad for each month of 1901 and 1902 have since been compiled in my office and inserted in the accounts for June (copy enclosed).

I have, &c.,
J. A. ROBERTSON,
for Offg. Director-General of Statistics.

MILLOWNERS' ASSOCIATION,
BOMBAY, *7th November* 1903.

THE DIRECTOR-GENERAL OF STATISTICS,
GOVERNMENT OF INDIA,
CALCUTTA.

SIR,

I am instructed by the Committee of the Bombay Millowners' Association to acknowledge with thanks the receipt of your letter No. 2040 of the 8th ultimo, together with a copy of the statistics of cotton spinning and weaving in the Indian mills in June 1903. The Committee direct me to convey to you again their thanks for your compliance with their suggestion in respect of the figures for the cotton mills located at Ahmedabad.

I have, &c.,
FREDERICK NOEL-PATON,
Secretary.

Appendix C.

Ventilation of Factories.

MILLOWNERS' ASSOCIATION,
BOMBAY, *25th May* 1903.

Minutes of Meeting of the Sub-Committee appointed to confer with the Collector on the subject of the Ventilation of Factories, held on Thursday, 21st May 1903, at 4-30 p.m.

Present:

SASSOON J. DAVID, Esq., in the Chair.
W. BRADY, Esq.
N. N. WADIA, Esq., and
THE SECRETARY.

Read letter from Mr. John Wallace, C.E., stating the terms on which he would advise the Committee and attend the Conference with the Collector.

RESOLUTION.—Mr. Wallace to be thanked for his letter and informed that the Committee will hope to communicate with him later should occasion arise.

The Secretary reported the arrival, in a broken condition, of the apparatus for air-analysis which had been ordered from England, and stated that duplicates of the various pieces had been at once written for.

RESOLUTION.—Action approved.

Read again letter from the Collector, dated 21st April.

Resolved that the Collector be thanked for his letter and informed of the causes of the delay in considering the question. Say that when the apparatus is in a working order tests will be made, and that meantime the Secretary will be happy to show the apparatus to a representative of the Collector. Add that the Sub-Committee, after studying the Report of the Departmental Committee already submitted to the Collector, believe that the criterion therein proposed, *i.e.*, the percentage of pollution, will prove more generally applicable than any mechanical criterion as to apertures or the admission of a prescribed volume of fresh air.

FREDERICK NOEL-PATON,
Secretary.

MILLOWNERS' ASSOCIATION,
BOMBAY, 22*nd May* 1903.

THE COLLECTOR OF LAND REVENUE, CUSTOMS AND OPIUM,
BOMBAY.

SIR,

Under the instructions of the Sub-Committee of this Association deputed to meet you on the subject of ventilation, I have the honour to thank you for your letter No. F. I.—198, dated 30th April, and to express regret for the delay that has attended their reply. That delay has arisen from the absence of several members from Bombay.

2. In my letter of the 4th April I mentioned that an order had been placed for one of the apparatus for air-analysis described in the Blue Book forwarded to you at the same time. This apparatus was received in a broken condition on the 4th of this month and an order was despatched by the mail of the 9th for duplicates of the parts. Meantime an unsuccessful effort has been made to repair the damage locally. Pending the receipt of the parts required, it will be impossible to test the efficiency of the apparatus and to clear up certain points on which the Committee are in some doubt. Meantime, if you or one of your assistants care to call at this office, I shall be glad to show the apparatus and explain its working. I am further authorised to say that, after study of the Report of the Departmental Committee on Ventilation, the Sub-Committee believe that the soundest basis of legislation will be found in the direction indicated by that report, and that the best criterion of general application would be the degree of impurity found in the atmosphere instead of the stipulation of mechanical conditions such as the dimensions of apertures or the volume of air to be admitted. But it is seen that the practicability of this test will ultimately depend on the efficiency of the analytic apparatus in the hands of an operator of ordinary skill.

I have, &c.,
FREDERICK NOEL-PATON,
Secretary.

No. F. I.—234 OF 1903.

FROM

THE COLLECTOR OF LAND REVENUE, CUSTOMS AND OPIUM,
BOMBAY;

TO

THE SECRETARY,
MILLOWNERS' ASSOCIATION,
BOMBAY.

TOWN CUSTOMS HOUSE, FACTORY DEPARTMENT,
BOMBAY, 25*th May* 1903.

SIR,

I have the honour to acknowledge yours of 22nd instant, and to point out that it omits to fix any date on which your deputation will wait on me as proposed.

2. It seems to me that additional and needless delay will occur if your deputation defer the meeting until they have tested the apparatus and resolved their doubts.

3. The testing of the apparatus can best be done by the expert, who, it is presumed, will be appointed to test with it the air in the Bombay mills, while the data obtained in this way will supply the best possible means of settling doubtful points.

4. It will, of course, be impossible to analyse the air until the apparatus has been received, but I can see no objection to our making arrangements, so that when the apparatus arrives we may proceed at once to the analysis.

5. For this object I should be glad if your Sub-Committee would fix a day not later than June 8th on which they will meet me at my office in the Custom House.

I have, &c.,
E. GRAY,
Collector of Land Revenue, Customs and Opium.

MILLOWNERS' ASSOCIATION,
BOMBAY, 28*th May* 1903.

THE COLLECTOR OF LAND REVENUE, CUSTOMS AND OPIUM,
BOMBAY.

SIR,

Under the instructions of the Committee of the Bombay Millowners' Association I have the honour to acknowledge the receipt of your letter No. F. I.—234 of the 25th instant, and to say that the members of the Sub-Committee referred to in my communication of the 22nd May will wait on you, at your Office, the Custom House, on Thursday, the 4th June, at 11-30 a.m.

I have, &c.,
FREDERICK NOEL-PATON,
Secretary.

No. $\frac{\text{F. I.}}{240}$ OF 1903.

FROM
THE COLLECTOR OF LAND REVENUE, CUSTOMS AND OPIUM,
BOMBAY;

TO
THE SECRETARY,
MILLOWNERS' ASSOCIATION,
BOMBAY.

BOMBAY, COLLECTOR'S OFFICE,
FACTORY DEPARTMENT,
28*th May* 1903.

SIR,

In reply to yours of to-day's date I have the honour to state that I have a case fixed for 12-30 p.m. on the 4th June, and that the same hour on 8th June would therefore be more convenient to me.

2. If, however, this date be not found suitable by the members of your Sub-Committee I shall, on hearing from you, make arrangements to meet them on the date proposed.

I have, &c.,
E. GRAY,
Collector of Land Revenue, Customs and Opium,
Bombay.

MILLOWNERS' ASSOCIATION,
BOMBAY, *2nd June* 1903.

E. GRAY, ESQ., I.C.S.,
COLLECTOR OF LAND REVENUE, CUSTOMS AND OPIUM,
BOMBAY.

SIR,

I am instructed to acknowledge the receipt of your letter No. F. I.—240 of the 28th ultimo, and to say that the Sub-Committee referred to would prefer to meet you on Thursday, the 4th instant, at 11-30 a.m., to discuss the question of Ventilation in Mills.

I have, &c.,
FREDERICK NOEL-PATON,
Secretary.

BOMBAY MILLOWNERS' ASSOCIATION.

Ventilation in Mills.

Report of the Sub-Committee appointed to confer with the Collector of Land Revenue, Customs and Opium on the above subject :—

The following members of the Sub-Committee, *viz.*,
SASSOON J. DAVID, Esq.,
W. H. BRADY, Esq.,
VITHALDAS D. THACKERSEY, Esq.,
N. N. WADIA, Esq., and
THE SECRETARY,

waited on the Collector, at the Custom House, on Thursday, 4th June 1903, at 11-30 a.m. (Mr. Bomonji D. Petit was unavoidably absent.)

The Collector, having introduced the question, invited the Committee of the Association to formulate a scheme for such a joint effort as had been suggested, with a view to establishing some general principles to govern the ventilation of factories in India.

Mr. David referred to the steps already taken by the Association towards that end and the circumstance that had for the moment prevented their prosecution. He renewed the assurance of co-operation ; but submitted that, pending the final pronouncement of the Board of Trade upon the issues submitted to the Departmental Committee now sitting, little progress could be made, seeing that any rules for the ventilation of factories in India would be to a great extent governed by the decision come to at home. No tests made in Bombay could therefore determine whether a particular mill was or was not well ventilated with reference to a standard not yet defined. He stated that the Association intended to prosecute its examination of the air in the mills so soon as the apparatus injured in transit to Bombay had been repaired.

The Collector explained that the formal conduct of such an examination was all that Government desired at the present stage, and he suggested that a Joint Committee should be appointed to go into the matter and draw up a scheme. He indicated that a feature of the scheme should be an agreement that the expenses, estimated at about Rs. 300 per mensem, would be defrayed by Government and by the Association jointly and in equal proportions.

It was objected by the deputation, firstly that they had no power to pledge the Association to such participation in the expenditure of Government ; secondly, that it would be unreasonable to expect so large a participation on the part of a private Association of limited numbers in expenses undertaken for the behoof of the public health of the whole Presidency or of the whole

of India; thirdly, that the simplest and most natural course would be that Government should appoint one analyst and the Association should appoint another for the purpose of control, and that Government and the Association respectively should bear their own expenses.

Mr. Martin pointed out, however, that it was not intended to legislate for the whole of India but for mills in the Presidency and not for the general health of the public at large, but only generally as far as workmen in factories are concerned.

Since the deputation had no power to sanction the proposal made, it was agreed that the matter should be referred to the General Committee of the Association.

On the invitation of the Collector the following gentlemen were appointed to form a Joint Committee to prepare a tentative scheme for a systematic analysis of the air of the various mills :—

JAMES REA MARTIN, ESQ., I.C.S., } Representing the Collector.
J. D. F. ENGEL, ESQ., }

N. N. WADIA, ESQ., } Representing the Association.
THE SECRETARY., }

It was arranged that the Secretary of the Association should order a second apparatus of the Scott-Haldane pattern for the Association and one on account of the Collector.

BOMBAY MILLOWNERS' ASSOCIATION.

Ventilation in Mills.

Report of the Representatives of the Association on the small Joint Committee appointed at Conference with Collector to prepare a tentative scheme for a systematic analysis of the air of the various mills in Bombay.

The Joint Committee met at the rooms of the Association on Monday, the 6th July 1903, at 4 p.m. There were present :—

J. R. MARTIN, Esq., I.C.S., } Representatives of the Collector.
J. D. F. ENGEL, Esq., }

N. N. WADIA, Esq., }
F. NOEL-PATON, Esq., } Representatives of the Association.
Secretary, }

The Report of the Conference of 4th June was revised in the light of Mr. Martin's letter of the 9th June, was slightly amended at his request, and was then approved as giving broadly the sense of the discussion.

It was agreed that the work of the Joint Committee was limited to recommending a procedure for the conduct of air tests to ascertain what was the position of Bombay Mills in respect of ventilation.

Mr. Wadia explained that the Association was not financially or otherwise in a position to undertake any part of the expense of an investigation which, in their view, belonged correctly to the functions of Government.

Mr. Martin said that the Collector had inferred from the use of the word "co-operate" in the Association's letter of the 27th September 1902, and from the fact that on a previous occasion the Association's co-operation had taken the form of participation in expenditure, that the co-operation now offered would be of the same form. He recognised that it was no doubt unusual that a body like the Millowners' Association should bear any share of the expense of a departmental inquiry; but, on the other hand, he pointed out that it was equally contrary to precedent to allow such a body to take part in the conduct of such an inquiry. He was unable to say whether Government would consent to the one without the other.

Meantime, since the scheme to be suggested by the Joint Committee was "tentative," it was agreed that he (Mr. Martin) should recommend to Government that tests of the air of mills should be made by a chemical analyst to be lent by Government under the supervision of a Joint Committee to consist of Mr. Engel, Inspector of Factories, and a representative of the Millowners' Association.

The undersigned have therefore to beg that the assent of the Committee be given to this arrangement and that a representative of the Association be appointed to act with the Inspector of Factories.

N. N. WADIA.
FREDERICK NOEL-PATON.

BOMBAY, 8*th July* 1903.

MILLOWNERS' ASSOCIATION,
BOMBAY, 21*st July* 1903.

THE COLLECTOR OF LAND REVENUE, CUSTOMS AND OPIUM,
FACTORY DEPARTMENT,
BOMBAY.

SIR,

The Committee of the Bombay Millowners' Association have had before them the Report of their two representatives on the small Joint Committee appointed at the Conference held with you on the 4th June to prepare a tentative scheme for the conduct of tests of air in mills in Bombay. Under their instructions I now have the honour to inform you that, having regard to the inability of the Association to bear any part of the expense of the enquiry you desire to hold in Bombay, they do not press to be admitted to formal participation in an investigation in which, as they fully recognise, the Department must be dominant and ultimately responsible. If the Committee knew among their members or elsewhere in India a person capable of making a really authoritative pronouncement on a subject which in England has been considered to require the study of the most eminent specialists, the position would be different. Again, if Government were prepared to bring out from England such a specialist and to be guided by him in establishing a standard or standards of ventilation for all India, or even in saying whether and how far the standard recently recommended by Messrs. Haldane and Osborn is applicable to the climatic and industrial conditions of India, the Committee would be able to receive the proposals with the cordiality they should like to feel in such a matter. But they think it their duty to the Government as well as to themselves to say that, in such a matter and particularly in view of Government's last effort at legislation in respect of it, the report and recommendations of persons not specially qualified would fail to command real confidence; and although most anxious to find common ground with your Department they cannot free themselves of misgivings lest a formal participation by them in an enquiry conducted on the lines suggested by you might, erroneously, be supposed to imply the existence of such confidence. They are aware that the tests which you propose to have made by the Department, with the help of an assistant from the laboratory of the Chemical Analyst to Government, would ostensibly be tentative in character. But while it is evident that an investigation so conducted would be inadequate as a basis of legislation, to my Committee it appears that if it does not furnish such a basis it is useless and even liable to misconstruction. They, therefore, think that it will tend to the clearness of the position if they abstain from formal participation in the particular enquiry which you now desire to conduct, and confine themselves to using, as they gladly will, their influence with millowners to secure all facilities for those who may be appointed by Government.

2. They have explained their position at some length because they have not always felt that their inability to adopt your views was understood by you.

3. Finally, they instruct me to repeat their respectful recommendation that the Government of India should be moved to bring out from England a recognised expert in ventilation to the end that a reasonable standard or standards of ventilation be established for the whole of India. And I am to beg that, when Government feels itself in a position to proceed to fresh legislation on the question, the Committee of the Association may be allowed the privilege of reporting on the proposals.

I have the honour to be,
Sir,
Your most obedient servant,
FREDERICK NOEL-PATON,
Secretary.

No. $\frac{F. I.}{847}$ OF 1903.

COLLECTOR'S OFFICE,
BOMBAY, *27th July* 1903.

FROM
E. GRAY, ESQ., I.C.S.,
COLLECTOR OF LAND REVENUE, CUSTOMS AND OPIUM,
BOMBAY,

TO
THE SECRETARY,
MILLOWNERS' ASSOCIATION,
BOMBAY.

SIR,

I have the honour to acknowledge receipt of yours of 21st instant.

2. While regretting that the Bombay Millowners' Association does not see its way to participating in the inquiry which it is proposed to hold as to the state of the air in the mills of Bombay, I cannot, under the circumstances, press for any such participation.

3. I have to thank you for your offer of assistance by the use of your influence with millowners to secure facilities for those appointed by Government to conduct the investigation, and in conclusion to state that your views on the matter, as expressed in the above letter, will be laid before Government.

I have, &c.,
J. R. MARTIN.
for Collector.

MILLOWNERS' ASSOCIATION,
BOMBAY, *5th June* 1903.

MESSRS. C. E. MULLER, ORME & Co.,
148, HIGH HOLBORN, W.C.,
LONDON.

DEAR SIRS,

Referring to my letters of 8th and 15th May 1903, I am directed by the Committee of the Bombay Millowners' Association to ask you to be so good as to forward to this Association, as early as possible, two other apparatus (Scott-Haldane Pattern) for the analysis of air, similar to that recently supplied by you to Mr. Frederick Noel-Paton, Secretary of this Association, through Dr. Haldane, together with spare pieces as already ordered for that received. I may mention that one is for Government, and I should be obliged if special care is taken to make the water-jacket water-tight for this climate, and that special care be taken in the packing, as you will remember the Potass reservoir, in the apparatus already received, was broken in transit owing to its close proximity to the side of the box.

I have, &c.,
C. J. MICHAEL,
for Secretary.

MILLOWNERS' ASSOCIATION,
BOMBAY, 31*st August* 1903.

THE COLLECTOR OF LAND REVENUE, CUSTOMS AND OPIUM,
BOMBAY.

SIR,

With reference to the order given by this Association on your account for one of Haldane's apparatus for testing air, I have, under the instructions of the Committee of the Bombay Millowners' Association, the honour to inform you that the apparatus has now been received.

2. I beg to hand you at the same time debit note for Rs. 60-2-0, being cost as follows:—

Apparatus	Rs.	48	6 0
Half clearing charges	„	11	12 0
	Rs.	60	2 0

The apparatus will be delivered to your messenger on demand.

I have, &c.,
FREDERICK NOEL-PATON,
Secretary.

No. F. I. 397 OF 1903.

BOMBAY, COLLECTOR'S OFFICE,
FACTORY DEPARTMENT,
3rd September 1903.

FROM
THE COLLECTOR OF LAND REVENUE, CUSTOMS AND OPIUM,
BOMBAY;

To
THE SECRETARY,
THE MILLOWNERS' ASSOCIATION,
BOMBAY.

SIR,

With reference to your letter of 31st August 1903 I have the honour to ask you to kindly deliver the apparatus to bearer and to thank your Association for their trouble in the matter.

2. Could you let me know the amount of duty paid on one apparatus? On receipt of this I shall forward a certificate exempting the apparatus which as Government property is free from duty, and entitling you to a refund of the duty paid on it. Kindly let me have a fresh debit note deducting duty charges.

3. The amount of this will be paid to you in a few days on receipt of the necessary sanction.

I have, &c.,
J. R. MARTIN,
for Collector of Land Revenue, Customs and Opium,
Bombay.

MILLOWNERS' ASSOCIATION,
BOMBAY, *4th September* 1903.

THE COLLECTOR OF LAND REVENUE, CUSTOMS AND OPIUM,
BOMBAY.

SIR,

In compliance with your request made in your letter No. F. I.—397 of yesterday's date, I have delivered the Haldane apparatus to your bearer, and have now the honour to hand you an amended debit note in which Rs. 3-8-0, being half the duty paid on the two apparatus, is deducted.

I have, &c.,
FREDERICK NOEL-PATON,
Secretary.

No. $\frac{\text{F. I.}}{496}$ OF 1903.

FROM
THE COLLECTOR OF LAND REVENUE, CUSTOMS AND OPIUM,
BOMBAY;

To
THE SECRETARY,
THE MILLOWNERS' ASSOCIATION,
BOMBAY.

BOMBAY COLLECTOR'S OFFICE,
FACTORY DEPARTMENT,
26th November 1903.

SIR,

With reference to the correspondence ending with your letter, dated the 4th September 1903, I have the honour to forward herewith Rs. 56-10-0, being the cost of the Haldane's Air Apparatus purchased by your Association on behalf of this Department, and to request the favour of your furnishing me with a duly stamped receipt in duplicate for the amount.

2. As regards the amount of customs duty, *viz.*, Rs. 3-8-0, paid by your Association on the apparatus in question, I have the honour to inform you that, under Section 20 of the Sea Customs Act, the apparatus is entitled to free entry as Government property. On your applying to the Collector of Customs, Bombay, for the refund of the above sum, enclosing the original duty bill under which the duty was paid into the Customs treasury, the amount will be refunded.

3. I regret the unavoidable delay which has occurred.

I have, &c.,
J. R. MARTIN,
for Collector of Land Revenue,
Customs and Opium, Bombay.

MILLOWNERS' ASSOCIATION,
BOMBAY, *26th November* 1903.

THE COLLECTOR OF LAND REVENUE, CUSTOMS AND OPIUM,
BOMBAY.

SIR,

I have the honour to acknowledge the receipt of your letter, No. F. I. 496 of this date, forwarding the sum of Rs. 56-10-0, being the cost of Haldane's Air Apparatus supplied to you by the Association. I enclose stamped receipt in duplicate for the amount.

2. I note that the Customs duty, *viz.*, Rs. 3-8-0, will be refunded on applying to the Collector of Customs, Bombay, with the original duty bill attached.

I have, &c.,
FREDERICK NOEL-PATON,
Secretary.

MILLOWNERS' ASSOCIATION,
BOMBAY, *5th May* 1903.

JOHN SCOTT HALDANE, ESQ., F.R.S.,
4, ST. MARGARET'S ROAD,
OXFORD.

DEAR SIR,

Your letter of the 10th May, addressed to Mr. Frederick Noel-Paton, has been duly received, and he desires me, in his absence from Bombay for a short time, to again thank you for all the trouble you have taken in forwarding the apparatus for the analysis of air. I send a Post Office money order for—

£ 4-1-8

to cover cost and expenses.

Again thanking you,

I am, Dear Sir,
Yours faithfully,
C. J. MICHAEL,
for Secretary.

MILLOWNERS' ASSOCIATION,
BOMBAY, *18th September* 1903.

N. N. WADIA, ESQ.,
CUMBALLA HILL,
BOMBAY.

DEAR SIR,

I beg to inform you that the Haldane Apparatus for testing air, which you desired the Committee to obtain for you from England, has now been received and will be delivered to your representative on application at this Office. The cost of the apparatus, including duty and clearing charges, amounts to Rs. 60-2-0.

I am, Dear Sir,
FREDERICK NOEL-PATON,
Secretary.

THE CENTURY SPINNING AND
MANUFACTURING COMPANY, LD.,
BOMBAY, *22nd September* 1903.

THE SECRETARY,
THE BOMBAY MILLOWNERS' ASSOCIATION,
FORT, BOMBAY.

DEAR SIR,

I am in receipt of your favour of the 18th instant, intimating that the Haldane Apparatus I had desired the Committee to obtain for me has duly arrived, and I shall thank you to deliver the same to the bearer, my clerk Mr. Nadirshah Sorabjee. Herewith please find my cheque for Rs. 60-2-0, the cost and the charges of the apparatus, receipt of which kindly acknowledge and oblige.

I am, Dear Sir,
Yours faithfully,
N. N. WADIA.

MILLOWNERS' ASSOCIATION,
BOMBAY, 22*nd September* 1903.

N. N. WADIA, ESQ.

DEAR SIR,

I have to thank you for your letter of this date together with cheque for Rs. 60-2-0 in payment of the Haldane air apparatus. I forgot to mention, when writing to you on the 18th instant, that the Association had received a set of spare glass parts for this apparatus. It may be worth your while to have these also—seeing that they are not procurable in India—and I am accordingly handing them to your representative along with the complete apparatus. The cost of the spare parts is £1-10, and I shall be glad to receive a remittance for the equivalent thereof at your convenience.

Yours faithfully,
FREDERICK NOEL-PATON,
Secretary.

THE MUIR MILLS COMPANY, LD.,
CAWNPORE, 30*th September* 1903.

THE SECRETARY,
MILLOWNERS' ASSOCIATION,
BOMBAY.

DEAR SIR,

With reference to the remarks on page 11 of the report of the Association for last year, I would be much obliged if you would obtain for us also one of the sets of apparatus for sampling and testing the air in a shed, sending it to us V. P. or in any other manner you think best.

Thanking you in anticipation,

Yours faithfully,
G. M. JOHNSON,
Managing Director.

MILLOWNERS' ASSOCIATION,
BOMBAY, 3*rd October* 1903.

THE MANAGING DIRECTOR,
THE MUIR MILLS COMPANY, LD.,
CAWNPORE.

DEAR SIR,

In reply to your letter of the 30th ultimo, I am directed to refer you to the makers of the instruments for testing air in factories. The name and address of the firm are as follows :—

Messrs. C. E. Muller, Orme & Co.,
148, High Holborn, London, W. C.

The cost of those last received with spare pieces (which it is desirable to order) was £ 4-15-0 each, and clearing charges, including duty, would be about Rs. 20.

I am to say that it would be well that you should obtain at the same time a copy of the Report of the Departmental Committee on Ventilation, which is procurable from Messrs. Eyre & Spottiswood, East Harding Street, Fleet Street, London, E.C., price five shillings and eight pence, including postage. This report contains directions for using the apparatus, but as it is understood that improvements have recently been made, the manufacturers should be asked for a copy of more recent directions.

I am, Dear Sir,
Yours faithfully,
FREDERICK NOEL-PATON,
Secretary.

Appendix D.

Factories Act.

Shuttle Guards.

No. $\frac{\text{F. I.}}{481}$ of 1903.

From

The CHIEF INSPECTOR of FACTORIES,
Bombay,

To

The SECRETARY,
The Millowners' Association,
Bombay.

Factory Department,
Bombay, 14*th November* 1903.

Sir,

I have the honour to invite your attention to the correspondence ending with this office letter No. F. I.—56 of 28th January last, *re* the adoption of shuttle guards in Bombay mills. I presume that the various forms of guards referred to in paragraph 5 of your letter of the 16th idem have now been in use for some time, and should therefore be glad if you would be so good as to inform me whether, in view of the experiments referred to in your letter quoted above, your Association has any further remarks to offer on the subject.

I have, &c.,
J. R. MARTIN,
Chief Inspector of Factories,
Bombay.

Millowners' Association,
Bombay, 17*th November* 1903.

The CHIEF INSPECTOR of FACTORIES,
Bombay.

Sir,

Shuttle Guards.

I am directed to acknowledge the receipt of your letter No. F. I.—481 of the 14th instant, and to say that the Committee are in communication with the members of the Bombay Millowners' Association on the above subject, and will address you further on hearing from them.

I have, &c.,
FREDERICK NOEL-PATON,
Secretary.

Millowners' Association,
Bombay, 16*th November* 1903.

Circular to Members.

Shuttle Guards.

(*See* Report of Association for 1902, p. 102.)

I am directed by the Committee of the Bombay Millowners' Association to circulate the appended copy of a letter* received from the Chief Inspector of Factories on the above subject, and to say that the Committee will be glad to have information as to the results attending the use of the various types of guard.

I have, &c.,
FREDERICK NOEL-PATON,
Secretary.

---

* No. F. I.—481, 14th November 1903.

MILLOWNERS' ASSOCIATION,
BOMBAY, *5th December* 1903.

THE CHIEF INSPECTOR OF FACTORIES,
BOMBAY.

SIR,

Under the instructions of the Committee of the Bombay Millowners' Association and in continuation of my letter of the 17th November, I am directed to say that they have really nothing to add to the proposals made by them in para. 4 of their letter of the 16th January 1903.

2. On the receipt of your letter of the 14th November a circular was issued to the various weaving mills in Bombay, and, in accordance with the promise given in para. 5 of the Committee's letter of the 16th January, I am now directed to give you the names of those 6 mills* who have replied that they are using guards of various kinds. It is noticeable that whereas the Committee were given to understand that moveable guards would be preferred, fixed guards seem to have been put in by most of the said mills.

I have, &c.,
FREDERICK NOEL-PATON,
Secretary.

* The Swadeshi Mills Co., Ld.
The Century S. and Manfg. Co., Ld.
The Central India S., W. and Manfg. Co., Ld.
The Emperor Edward S. and Manfg. Co., Ld,
The Standard Mills Co., Ld.
The Sholapore S. and W. Co., Ld.

Appendix E.

Factories Act.

Protection of Machinery.

(Feeding Roller of Cotton Opener.)

ELGIN MILLS COMPANY,
CAWNPORE, *26th September* 1903.

THE SECRETARY,
BOMBAY MILLOWNERS' ASSOCIATION,
BOMBAY.

DEAR SIR,

The Officiating Special Inspector of Factories for this Province has in his report on our mills made the following remark on his return under Form B :—

"The feeding roller of the cotton opener should be fenced and a board carried along the top of feeding trough to such a distance as to prevent a hand accidentally being caught by the roller."

In this connection, I shall be much obliged if you would kindly let me know if any such order for covering over the lattice which feeds the Crighton opener has been issued in any of your Bombay mills. We believe such a thing has never been heard of anywhere.

The Inspector in the present case is officiating only, and we gathered from him that he had not inspected mills before and knew nothing of cotton machinery. Although the Inspector's order is too indefinite to require compliance under the Act and needs no appeal, the District Magistrate, who knows still less about the subject, is sure to follow the matter up and enquire if the order has been complied with, and we therefore trouble you to kindly let us have the information we ask for above.

Yours, &c.,
T. E. STRACHEY,
Managing Partner.

MILLOWNERS' ASSOCIATION,
BOMBAY, *29th September* 1903.

TO THE MANAGING PARTNER,
THE ELGIN MILLS CO.,
CAWNPORE.

DEAR SIR,

I am directed by the Committee of the Bombay Millowners' Association to acknowledge the receipt of your letter, of the 26th instant, relating to a remark made by the Officiating Special Inspector of Factories regarding protection of part of your machinery, and to express their regret that they do not find it possible to take up questions relating to mills not members of the Association. I am to say that this Association exists for the purpose of dealing with such points as you now bring before them and that the extent of the work done by them in the interests of the milling industry throughout India makes a strong claim upon the support of such companies as yours, and precludes indefinite expansion of their activity without such support. I am, therefore, to enclose a copy of the New Rules of the Association and to express the hope that you may see your way to becoming a member. If you desire fuller information, a copy of the Annual Report recently issued will be forwarded on receipt of the sum of Rs. 2 (two) only.

I have, &c.,
FREDERICK NOEL-PATON,
Secretary.

ELGIN MILLS COMPANY,
CAWNPORE, *3rd October* 1903.

THE SECRETARY,
MILLOWNERS' ASSOCIATION,
BOMBAY.

DEAR SIR,

I am in receipt of your letter of the 29th September, enclosing copy of the Rules and Regulations of your Association, for which I am obliged.

My letter to you appears to have been misunderstood. I did not want your Association to take up any matter on our behalf, knowing, of course, full well that the case of an outside member could not be considered. I merely wrote asking for information on a certain point. It would, no doubt, have been given me by individual members of your Association, and thinking that you would be able to answer for the whole, I ventured to save myself the trouble of addressing many by applying to you for the information. The matter I mentioned would, if it becomes necessary, be submitted to our local Chamber of Commerce, who might ask you for the same information which, if available, would, I presume, not be declined to them.

I have written the above not with a view to troubling you further in the matter, but merely because it seems to us that your Committee have not understood our attitude in addressing you.

Yours, &c.,
T. E. STRACHEY,
Managing Partner.

MILLOWNERS' ASSOCIATION,
BOMBAY, *7th October* 1903.

THE MANAGING PARTNER,
THE ELGIN MILLS CO.,
CAWNPORE.

DEAR SIR,

I am directed by the Committee of the Bombay Millowners' Association to acknowledge the receipt of your letter of the 3rd instant. They believe that your letter was not misunderstood by them, but I am to say that they have found it necessary to discriminate between communications made to them by individuals not members of this Association and communications made to them by recognised public bodies.

I have, &c.,
FREDERICK NOEL-PATON,
Secretary.

Appendix F.

Boiler Act.

Guarding of Safety Valves.

No. $\frac{\text{B. I.}}{473}$ OF 1903.

FROM
THE COLLECTOR OF BOMBAY,
BOMBAY,

TO
THE SECRETARY,
MILLOWNERS' ASSOCIATION, BOMBAY.

BOMBAY COLLECTOR'S OFFICE,
STEAM BOILER DEPARTMENT,
BOMBAY, *3rd February* 1903.

SIR,

I have the honour to request that you will be good enough to put the following before your Association :—

The British Board of Trade Rules require that one safety valve in each boiler should be put beyond the control of the engineer-in-charge. So far no special attention has been paid to the necessity of enforcing a similar rule in the case of boilers in the Bombay Presidency, but for reasons which it is not necessary to discuss here, it seems desirable that some action in this direction should be taken. The Boiler Commission, to whom the matter was referred, were of opinion that a similar rule could advantageously be enforced in India, and in communicating to you the recommendations of the Boiler Commission I have the honour to request that their wishes may be given effect to.

The general effect of their recommendations is that every boiler should be fitted up with one "lock-up" safety valve to be sealed by the Inspector at the time of his annual visit. As the Bombay Boiler Inspection Rules require that each boiler must be fitted with at least two safety valves, the casing of one of them will not cause any practical inconvenience. A sketch is enclosed, which please return, showing how both dead-weight safety valves as well as lever and weight valves can be cased in and sealed. The casing proposed is, as you will see, so fitted with perforations as to allow free escape of steam.

I may add that a practical experiment has been made in Bombay with the proposed casing, and it was found to work satisfactorily. The probable cost, if made, of ordinary sheet iron or steel would be Rs. 12 per valve.

I have, &c.,
E. GRAY,
Collector of Bombay.

MILLOWNERS' ASSOCIATION,
BOMBAY, *7th April* 1903.

THE COLLECTOR OF BOMBAY,
BOMBAY.

SIR,

Under the instructions of the Committee of the Bombay Millowners' Association, I have the honour to acknowledge the receipt of your letter, No. B. I.—473 of 3rd February, regarding the proposal of the Boiler Commission that one safety valve in each boiler should be put beyond the control of the engineer-in-charge. I am to express the regret of the Committee for the delay which has attended their reply and which has arisen from the failure of persons consulted in the matter to make prompt reply.

2. I am to say that the Committee are agreed that the proposal is a sound one in principle and that the casing indicated in the drawing is likely to be efficient. Certain minor modifications of this casing are advocated, but it is assumed that the Inspectors will not object to the adoption of any such improvements as do not injure the efficiency of the fixture for its prime purpose.

3. In the opinions furnished to the Committee there is unanimous reference to the fact that all safety valves are apt to leak and that such leakage necessitates removal and grinding of the valve. It is assumed that when this course has been necessary, the Inspector will re-seal the casing without making a charge for doing so.

I have, &c.,
FREDERICK NOEL-PATON,
Secretary.

MILLOWNERS' ASSOCIATION,
BOMBAY, *5th May* 1903.

THE COLLECTOR OF BOMBAY.

SIR,

Since addressing you on the 7th ultimo regarding the proposal of the Boiler Commission that one safety valve in each boiler should be put beyond the control of the engineer-in-charge, the Committee are informed by a member of the Association that in the United Kingdom the only such rule in existence applies only to marine boilers and that land boilers are entirely free from such restrictions. The Committee have accordingly applied to authorities at Home for particulars on this point, and, pending replies from these bodies, I am to beg that you will delay passing orders on the subject.

I have, &c.,
FREDERICK NOEL-PATON,
Secretary.

MILLOWNERS' ASSOCIATION,
BOMBAY, 5*th May* 1903.

THE SECRETARY,
MANCHESTER STEAM USERS' ASSOCIATION,
MANCHESTER.

DEAR SIR,

A proposal has been made by the local authorities in charge of the factories and boilers in Bombay to require that in each mill boiler one at least of the safety valves should be enclosed in such a sealed guard as to put it beyond the control of the engineer. My Committee are informed that in the United Kingdom the only such rule in existence applies only to marine boilers and that land boilers are entirely free from such restrictions. I am therefore directed by them to beg that you will favour them with information on this point. If any such rule does apply to mill boilers in the United Kingdom, would you kindly forward particulars?

I have, &c.,
FREDERICK NOEL-PATON,
Secretary.

Similar letter to the Vulcan Boiler Insurance Company, Ltd.

THE MANCHESTER STEAM USERS' ASSOCIATION,
MANCHESTER, 26*th May* 1903.

THE SECRETARY,
THE MILLOWNERS' ASSOCIATION,
BOMBAY.

DEAR SIR,

In reply to your letter of the 5th inst., British passenger steamers must, according to the Board of Trade Regulations, have a lock-up safety valve on each boiler, the key being held by the captain. The winch boilers on the Mersey Docks, Liverpool, have also to have spring loaded safety valves with lever locks, the keys being held by the owners. This latter regulation was found necessary, because it was found that lever-loaded safety valves were frequently tampered with by the attendants. As regards marine boilers, Lloyds' regulations, according to which safety valves should be so arranged that they cannot be tampered with when steam is up, are perfectly safe. Our own regulations are practically the same, but having to deal with every type of valves we have no general regulation. Spring-loaded valves should have solid washers, tubes or rings under the screw-down nut which cannot be removed or tampered with while steam is up. Should an explosion occur, the depth of the ring or washer will be evidenced as to the load on the valve.

We insist on having the levers of lever safety valves cut to the right length, so that the weight hangs near the end. We allow only one weight on lever valves. If permission is granted to add bricks, &c., one never knows whether a valve is correctly loaded.

Dead-weight safety valves are not easily tampered with even if they are unenclosed. If the weights are so arranged that each slab corresponds to, say, 10 lbs. increase of pressure, then by counting the number of slabs one knows at once what the valve is loaded to.

My personal view about safety valves is that they should not be loaded, but they should be so designed that they cannot be tampered with when steam is up and that they cannot be overloaded or wedged down. The working parts should be of brass so as to prevent rusting fast. No oil should be used. Valves should have easing and turning gear, and (especially with lever valves) should be centrally loaded.

Yours, &c.,
C. E. STROMEYER,
Chief Engineer.

THE VULCAN BOILER AND GENERAL INSURANCE CO., LD.,

MANCHESTER, *25th May* 1903.

THE SECRETARY,

THE MILLOWNERS' ASSOCIATION,

BOMBAY.

DEAR SIR,

In reply to your enquiry of the 5th instant your Committee has been correctly informed. There is no rule or law existing in the United Kingdom which necessitates the enclosing of a safety valve in such a manner as to put it beyond the control of the engine-man. In fact, there is no law or rule regarding safety valves, excepting that contained in Clause 11 of the Factory Act, which provides that every steam boiler must have attached to it a proper safety valve and a proper steam gauge and water gauge to show the pressure of steam and height of water in the boiler; in fact, this section of the Factory Act contains the whole of the rules and conditions which apply to the working of land steam boilers in this country. I annex for your information copy on the other side.

You will perceive, therefore, that there is no rule as to the construction of safety valves or even as to their number or size. My own practice is, where boilers are of sufficient size, to attach two safety valves, one of which shall have an arrangement for indicating low water, as I find little or no reliance can be placed on any form of fusible plug or other means for detecting the existence of short water-supply.

Yours, &c.,

J. F. J. CROSLAND,

Chief Engineer.

Clause 11 *of the Factory and Workshop Act*, 1901.

"*Steam Boilers.*"

(1) Every steam boiler used for generating steam in a factory or workshop, or in any place to which any of the provisions of this Act apply, must, whether separate or one of a range—

(*a*) have attached to it a proper safety valve and a proper steam gauge and water gauge to show the pressure of steam and the height of water in the boiler; and

(*b*) be examined thoroughly by a competent person at least once in every fourteen months.

(2) Every such boiler, safety valve, steam gauge and water gauge must be maintained in proper condition.

(3) A report of the result of every such examination in the prescribed form, containing the prescribed particulars, shall within fourteen days be entered into or attached to the general register of the factory or workshop, and the report shall be signed by the person making the examination, and, if that person is an Inspector of a Boiler-Inspecting Company or Association, by the Chief Engineer of the Company or Association.

(4) A factory or workshop in which there is a contravention of this section shall be deemed not to be kept in conformity with this Act.

(5) This section shall not apply to the boiler of any locomotive which belongs to and is used by any railway company, or to any boiler belonging to or exclusively used in the service of His Majesty.

(6) For the purposes of this section, the whole of a tenement, factory or workshop shall be deemed to be one factory or workshop, and the owner shall be substituted for the occupier, and he shall register the report referred to in this section.

BOMBAY, 19*th June* 1903.

THE SECRETARY, MILLOWNERS' ASSOCIATION,
FORT, BOMBAY.

DEAR SIR,

In continuation of my letter of the 15th April last, I herewith enclose for the information of the Committee a letter received from Messrs. Hick Hargreaves & Co. which speaks for itself.

Yours, &c.,
N. N. WADIA.

MANCHESTER, 26*th May* 1903.

MESSRS. N. WADIA & SONS,
CUMBALLA HILL, BOMBAY.

DEAR SIRS,

BOILER RULES.

We have your favour of 9th May *re* the question of lock-up safety valves on boilers, and beg to reply as follows :—

There is not, so far as we are aware, any rule or custom whatever in this country that land boilers shall be fitted with a lock-up safety valve, but then you must recollect that, with the exception to which we shall refer later on, there really have been no definite rules in this country applicable to such boilers, though the question of making such rules has repeatedly been brought up in Parliament. Until quite recently it has amounted to this: you might work your boiler any way you like, but you were responsible for what happened, and if you had anything which the Board of Trade could call an explosion, which term they use in a very wide sense, there was a preliminary Board of Trade enquiry, and, if they thought fit, a formal and final enquiry before a court which has the power, which it frequently exercised, of fining anybody who it might think responsible in any way for the accident, either the firm or the firm's employees, or the engineer of the insurance company that they employ, or even an engineer friend who may have given advice gratis. Any and all of such people have been called upon to pay some portion of the cost of the enquiry.

The exception which we refer to above is, that Section 11 of the Factory and Workshops Act of 1901 requires (*a*) that every steam boiler used for generating steam in a factory or workshop to which the Act applies must have a proper safety valve, steam-gauge and water-gauge, and (*b*) that it shall be examined by a competent person at least once in every 14 months, which of course causes no difficulty to any large firm, as the insurance company furnish certificates serving the purpose.

On board ship there used, at the time the writer, Mr. Hudson, was engaged in marine work, to be an invariable rule that one of the safety valves should be locked up and the key kept by the captain of the vessel, who would be responsible for its not being used except in case of necessity ; but we think, with you, that it would be a hardship to require that every boiler should have a lock-up valve unless the key was accessible in case of real need. We should consider a high steam and low water safety valve should practically fulfil the requirements of a valve which is locked up, as it is not accessible when the boiler is under steam.

The fact of the valve being locked up in no way prevents it being fitted with an easing lever, so that the only real objection or chance of difficulty is in case of the valve faces getting bad and wasting steam.

Hoping our remarks may assist you.

We are, &c.,
HICK HARGREAVES & CO.

MILLOWNERS' ASSOCIATION,
BOMBAY, 11*th July* 1903.

THE COLLECTOR OF BOMBAY,
STEAM BOILER DEPARTMENT, BOMBAY.

SIR,

In continuation of my letter of the 5th May last on the subject of the fixing of guards upon one of the safety valves of mill boilers, I now have the honour, under the instructions of the Committee of the Millowners' Association, to wait upon you with copies of three letters from—

(*a*) The Vulcan Boiler and General Insurance Company, Limited, Manchester.

(*b*) The Manchester Steam Users' Association, Manchester.

(*c*) Messrs. Hick, Hargreaves & Co.

All these letters show that, so far as factory boilers are concerned, no such Board of Trade rule exists as was stated in your letter of the 3rd February last to be in force in England. That being so, they believe you will recognise that no good reason exists for instituting in India such a rule as both here and in England has in practice been found unnecessary.

I have, &c.,
FREDERICK NOEL-PATON,
Secretary.

BOMBAY COLLECTOR'S OFFICE,
STEAM BOILER DEPARTMENT,
BOMBAY, 17*th July* 1903.

No. $\frac{\text{B. I.}}{2854}$ OF 1903.

FROM

THE COLLECTOR OF BOMBAY,
BOMBAY,

To

THE SECRETARY,
MILLOWNERS' ASSOCIATION, BOMBAY.

SIR,

I have the honour to acknowledge with thanks your letter of 11th July 1903 and three letters attached.

2. I need hardly say that in coming to a conclusion on the question due weight will be given to the opinions and information contained therein.

3. On reference to this office letter No. B. I.—473 of 3rd February last, it will be seen that the Board of Trade rules are not stated to be in force in factories in England, where no legislation similar to the Bombay Boiler Inspection Act exists at present.

4. I regret that your former letter asking that final orders should not be issued in the matter until these letters arrived should have by oversight remained unanswered, though orders were issued to that effect.

I have, &c.,
J. R. MARTIN,
for Collector of Bombay.

Appendix G.

Inspection of Boilers (Appointment of a Senior Inspector of Boilers).

MILLOWNERS' ASSOCIATION,
BOMBAY, *7th March* 1903.

EVELYN GRAY, ESQ., I.C.S.,
COLLECTOR OF BOMBAY, BOMBAY.

SIR,

Under the instructions of the Committee of the Bombay Millowners' Association I have the honour to inform you that a letter in the following terms has this day been received from a member of the Association :—

"I am credibly informed that the post of Senior Boiler Inspector is vacant, and that "there is some likelihood of the appointment being made to that post of a person having "insufficient mill experience.

"I think therefore the Committee ought to address the Collector at once urging the "importance of appointing somebody with fullest qualifications."

The Committee are reluctant to move on a rumour whose substance they cannot but regard with some doubt, but they trust you may not think them importunate if they represent to you the important nature of the appointment in question. You will readily understand that the Association could not view with indifference the selection for the Senior Inspectorship of Boilers of any but a thoroughly competent man with wide practical experience of mill boilers, their functions and requirements. This is, of course, especially true at a time when there are several matters pending in which the Association, rightly or wrongly, and with the utmost respect, have conceived the action of the Department to show more consideration for the letter of the law as it stands than for the real requirements of an industry that has to compete in foreign markets with others working under less stringent regulations. You are necessarily concerned as much as they are to see that none but the best man should be appointed; and they feel sure therefore that you will pardon them for intervening in a question of this nature and begging that the intrinsic merits of the various candidates may have your personal consideration.

I have, &c.,
FREDERICK NOEL-PATON,
Secretary.

BOMBAY COLLECTOR'S OFFICE,
STEAM BOILER DEPARTMENT,
BOMBAY, *7th March* 1903.

No. $\frac{\text{B. I.}}{955}$ OF 1903.

FROM
THE COLLECTOR OF BOMBAY,
BOMBAY,

To
THE SECRETARY,
THE MILLOWNERS' ASSOCIATION, BOMBAY.

SIR,

I have the honour to acknowledge receipt of your letter of to-day's date, and to remain

Your most obedient servant,
E. GRAY,
Collector of Bombay.

Appendix H.

Factories Act (Urinals).

THE SVADESHI MILLS CO., LD.,
BOMBAY, 23*rd July* 1903.

THE SECRETARY,
MILLOWNERS' ASSOCIATION,
BOMBAY.

DEAR SIR,

In our mills at Coorla we have both latrines and urinals for the use of male operatives; but for females we provide latrine accommodation only. We have now received a communication from the Chief Inspector of Factories of the Thana District intimating that we should provide for our female workers urinals in addition to the latrines now in existence at our mills.

On inquiry at some of the Bombay mills we find that no such accommodation is insisted on in Bombay, and there are many mills which have no urinals either for male or female, all they provide being one latrine per every fifty operatives.

Although Rule 10 of the Government Resolution in 1892 is very clearly worded, yet it does not appear to be in general force. We ourselves think that the females would make use of latrines in preference to urinals as protecting their privacy better.

We shall be much obliged if you will be good enough to draw our attention to any correspondence carried on by you regarding the compulsory provision of urinals in factories? Your views on the subject will also be thankfully received.

Yours, &c.,
per pro. TATA & SONS,
Agents, The Svadeshi Mills Co., Ld.,
N. B. SAKLATVALA.

MILLOWNERS' ASSOCIATION,
BOMBAY, 23*rd July* 1903.

MESSRS. TATA & SONS,
AGENTS, THE SVADESHI MILLS CO., LD.

DEAR SIRS,

Your letter of this date will be submitted to the Committee. Meantime, I may draw your attention to the Report of the Association for 1892, p. 23, and the last para. of a letter addressed by the Association to the Collector. The Association at that time appears to have advocated the construction of urinals.

I have, &c.,
FREDERICK NOEL-PATON,
Secretary.

MILLOWNERS' ASSOCIATION,
BOMBAY, 20*th August* 1903.

MESSRS. TATA & SONS,
AGENTS, THE SVADESHI MILLS CO., LD.,
BOMBAY.

DEAR SIRS,

I am directed to acknowledge the receipt of your letter of the 23rd ultimo, with reference to the provision of urinals for female operatives. The matter has received the consideration of the Committee, and I am to say, in continuation of my letter of the 23rd July, that the absence of any real need for urinals as distinct from latrines is so obvious that the Committee consider it would be readily recognised by the Collector of Thana if properly put before him by your Company. I am, therefore, to suggest your addressing that official, and to say that the Committee will be interested to hear the result of your communication in due course.

I have, &c.,
FREDERICK NOEL-PATON,
Secretary.

THE SVADESHI MILLS CO., LD.,
BOMBAY, *25th August* 1903.

THE SECRETARY,
THE MILLOWNERS' ASSOCIATION,
BOMBAY.

DEAR SIR,

With reference to your favour of the 20th instant we beg to inform you that we have had to take up the work of providing urinals for females, as in spite of our representation to the Collector of Thana giving him our views we were asked to take the work in hand immediately. Having at the mills about twenty urinals for men, which are rather too many for the purpose, we are arranging to entirely screen off five out of these for females,—a step which has been approved of by the Collector.

We have, however, sent to the Collector a copy of your letter.

Thanking you for the trouble.

Yours, &c.,
TATA & SONS,
Agents.

Appendix I.

Indian Electricity Acts.

THE TEXTILE MANUFACTURING CO., LD.,
BOMBAY, *23rd June* 1903.

THE SECRETARY,
THE BOMBAY MILLOWNERS' ASSOCIATION,
BOMBAY.

DEAR SIR,

Regarding Inspection of Electric Light Installations on behalf of Government.

Under instructions from the Commissioner of Police, Mr. W. J. Birnie, M.I.M.E., has been for the last 2 or 3 years insisting every year to inspect the Electric Light Installations at the various Mills annually. Electric Light Act No. XIII of 1887 had a provision under Section IV empowering the Governor-General in Council to make certain rules as may be deemed necessary. Under these rules by a very wide meaning the Commissioner of Police insisted on having the various installations at the Mills examined. This Act No. XIII of 1887 has since been repealed and Indian Electricity Act No. II of 1903 has come into force. Section 31 of the new Act provides that "No person shall for any purpose, in any street or in any place in "which one hundred or more persons are likely ordinarily to be assembled or which is a "Factory within the meaning of the Indian Factories Act, 1881, use energy which is not sup- "plied to him under Part II, without giving not less than 7 days' clear notice in writing of his "intention to the District Magistrate or in a Presidency town to the Commissioner of Police "and complying with such rules as may be made in this behalf under Section 33."

You will see, therefore, that this section only specifies giving notice for the use of the Plant, but it is silent on the point of inspection on behalf of the Government when the Plant is originally started and annually afterwards. On the 7th of April we wrote to the Commissioner of Police as per copy enclosed inquiring under what section of the Act Mr. Birnie was authorized to come and inspect the installations put up, but instead of giving us the authority, as you will see from the enclosed copy of the Commissioner's reply, we were referred to the Government for the information required. As this matter is of general interest to the Bombay Millowners

we think the Association should take up the matter and inquire first and foremost from the Government under what authority Mr. Birnie comes to inspect the various installations and why annual inspection of the Electric Light Installations is considered necessary in the case of Mills. We may add that, as the Association is aware, the Fire Insurance Committee before they give permission for the Electric Light to be worked in any Mill they insist on having the Plant examined, and we consider such examination ought to be considered sufficient for the provision of protection to the Mill hands, as the Phœnix Fire Office rules are very strict and are adopted generally by the Bombay Fire Insurance Association. We think, therefore, that Association should address Government—

(1) Inquiring under what authority Mr. Birnie is empowered to inspect Electric Light Installations when originally put up.

(2) Under what authority he compels Millowners to have the Plant examined annually afterwards.

(3) What are his powers and duties if authorized by the Government.

(4) Are not these powers only restricted to see that proper provisions are made for the safety of the workmen and not to inspect the details and particulars of the Plant put up ?

(5) The Government be addressed further recommending that in case of Bombay Mills and up-country Mills inspection already made on behalf of the Fire Insurance Companies should be considered ample and copy of the Inspector's report, together with the notice from the occupier of the Company, should be considered sufficient under Section 31 of the new Act of 1903.

(6) If Government do not think this agreeable it would be advisable the Government will appoint an independent man. Mr. Birnie is the servant of the P. & O. Company, and we understand he is paid so much for every inspection he does at the Mills on behalf of the Government. Very often when a new installation is put up he often examines on behalf of the contractors for the Insurance Companies, and charges independent fee to the Contractors for doing this also. This is a most objectionable practice and liable to much abuse and we consider our Association should take steps to having an entirely independent man for it, if Government deem it absolutely necessary for inspection of the Mills. We ourselves think that the inspection made on behalf of the Insurance Companies is quite ample and sufficient for all requirements. Will you please place this letter before the Committee of the Association with a view of formal representation to the Government at an early date.

We are, dear Sir,

Yours faithfully,

For the Textile Manufacturing Company, Limited,

NOWROSJEE WADIA & SONS,

Agents.

BOMBAY, *7th April* 1903.

THE COMMISSIONER OF POLICE,

BOMBAY.

SIR,

Now that the Electricity Act No. 13 of 1887 is repealed by the Electricity Act of 1903 we shall feel obliged if you will let us know under what section of the new Act Mr. W. J. Birnie is authorized by Government to inspect all private installations put up.

Favour of a reply at your earliest convenience will oblige.

Yours faithfully,

NOWROSJEE WADIA & SONS.

BOMBAY, 15*th April* 1903.

No. $\frac{3199}{55}$ OF 1903.

FROM

THE COMMISSIONER OF POLICE,
BOMBAY;

To

MESSRS. NOWROSJEE WADIA & SONS,
CUMBALLA HILL, BOMBAY.

In reply to their letter of the 7th instant, Messrs. Nowrosjee Wadia & Sons are informed that they can apply to Government for the information required.

H. G. GELL,
Ag. Commissioner of Police.

THE TEXTILE MANUFACTURING CO., LD.,
BOMBAY, 30*th June* 1903.

THE SECRETARY,
THE MILLOWNERS' ASSOCIATION,
BOMBAY.

DEAR SIR,

In continuation of our letter of the 23rd instant, we find that last Thursday, the 25th of June, a draft of Notification, which is proposed to be issued in exercise of the power under Section 33 of the Indian Electricity Act of 1903, is published in the *Government Gazette* for the information of the public as required by Section 34, and notice is given that the said draft shall be taken into consideration after the 15th day of September 1903. The draft rules which are applicable to the Mills are published on pages 766—768. You will see from it that the rules are absolutely silent on the question of annual inspection. If a notice is given under Section 31 at the starting of the Installation an Electric Inspector appointed under Act by Government may enter and examine the Installation, and in Clause XXII the fees are specified, which will have to be charged by the Local Government for testing done by the Electric Inspector. Will you please, therefore, circulate among the members the copy of the rules which I have above quoted with a view of representation to Government in terms of our letter of the 23rd instant, so that the Government may be prevailed to accept the copy of the report of the Inspector on behalf of the Insurance Companies once for all as sufficient under the Act for Cotton Mills in Bombay and up-country.

We are, dear Sir,
Yours faithfully,
For the Textile Manufacturing Company, Limited,
NOWROSJEE WADIA & SONS,
Agents.

MILLOWNERS' ASSOCIATION,
BOMBAY, 22*nd July* 1903.

THE SECRETARY TO GOVERNMENT,
PUBLIC WORKS DEPARTMENT,
BOMBAY.

Sir,

With reference to the proposed rules under Indian Electricity Act, 1903, as set forth in the Draft Notification of the Government of India, Telegraph Department, No. 218, dated Simla, the 10th June last, and published in the *Bombay Government Gazette* of June 25th, 1903, I have the honour, under the instructions of the Committee of the Bombay Millowners' Association,

to submit the following considerations to His Excellency's Government for favour of transmission to the Government of India before the 15th September next, together with such remarks as His Excellency in Council may think necessary.

2. Draft Notification No. 218 gives the proposed Rules "imposing restrictions on the use of energy, not supplied under Part II of the said Act, at a pressure exceeding 100 volts." It is here evidently the intention that these Rules, as framed, will not be applied to Factories using energy at or under 100 volts. Rule 3 (1) provides that "where notice has been given by any person under Section 31 of the Act the District Magistrate or, in a Presidency Town, the Commissioner of Police, shall, on receiving such notice, forthwith report the circumstance to the Local Government, and thereupon any Electric Inspector, appointed under the Act, may enter, inspect and examine any place in which the Inspector or Officer has reason to believe that there is any appliance or apparatus used in the generation, supply or use of electricity."

3. It is here evidently the intention that such entry and inspection shall take place only "thereupon", that is to say, only on receipt of the notice given under Section 31 of the Act, at the time of the first installation of the appliance or apparatus; and in view of the recurring inspections made by Inspectors on behalf of Fire Insurance offices under the Phœnix Fire Office rules, additional inspections by Inspectors under the Electricity Act would be superfluous and vexatious, and would give power of an undesirable kind to such Inspectors. The Committee, therefore, direct me to recommend that in cases where a factory, under Section 31 of the Act, gives the prescribed notice of installation and attaches to such notice a certificate signed by the Inspector on behalf of the Fire Insurance Companies that the installation is in accordance with the Phœnix Fire Office rules and with the Rules under this Act, such certificate should be accepted by Government as satisfying the requirements of the Act in respect of inspection under the Rule 3 in question, but that if Government consider this insufficient they may have an independent inspection by their own Inspector only once after the installation, and such Inspector must not be in any way connected with the Fire Insurance Companies.

4. But the wording of the rule, when taken in conjunction with that of Rule 3 (2), is so far ambiguous that an Inspector, under the Act, might think himself entitled to make periodical inspections in addition to those of the Fire Insurance Company or Companies and to collect a fee on each occasion. I am to add that the meaning of the word "officer" used as an alternative to "Inspector" in the Rule, quoted in para. 2 of this letter, is not clear to my Committee.

5. The Draft Rules in question do not appear to include any rules under Section 33 (2) (1) "for the appointment of Electric Inspectors by the Local Government and prescribe the qualifications to be required of such Inspectors, and the remuneration and duties." The Committee, therefore, direct me to submit that it should be laid down that Electric Inspectors, under the Act, must be persons having no relations with a Fire Insurance Company or Companies or any Association of Fire Insurance Companies.

I have, &c.,
FREDERICK NOEL-PATON,
Secretary.

Appendix J.

Income-tax and the Depreciation of Factory Buildings.

THE TEXTILE MANUFACTURING CO., LD.,
BOMBAY, 1*st September* 1903.

THE SECRETARY,
MILLOWNERS' ASSOCIATION,
BOMBAY.

DEAR SIR,

In reply to a letter we have written to the Collector of Income-tax, Bombay, regarding the amount to be allowed for depreciation to the Mills or Buildings, to be deducted from profits before they are assessed for Income-tax, we received a reply from him as per enclosed copy. It

is rather an anomalous thing that no allowance should be given to the Mills for depreciation on buildings, while an allowance of 2½ per cent. on the cost value of all buildings on any factory is made in Great Britain. We think our Association should take this matter up and memorialize Government for this concession. There is no doubt that buildings do depreciate in value year after year though they may be kept limewashed and in ordinary repairs. Especially this is the case with the old-fashioned Mills, where wood is entirely used for beams, joists, flooring and the roof of the Mills, and if this fact in a country like Great Britain, where income-tax is so heavy and where they would not make any allowance unless it is necessary so to do, is recognized and a suitable allowance to the extent of 2½ per cent. is given in Great Britain, no reason can be adduced by the Government of India not to make same concession here.

Therefore we trust you will circulate this letter among the Committee of the Association and memorialize Government as they may deem best.

We are, dear Sir,
Yours faithfully,
For the Textile Manufacturing Company, Limited,
NOWROSJEE WADIA & SONS,
Agents.

True Copy.
No. 3149 of 1903-1904.

INCOME-TAX OFFICE,
BOMBAY, *6th August* 1903.

To

THE AGENTS,
THE TEXTILE MANUFACTURING CO., LD.,
BOMBAY.

GENTLEMEN,

With reference to your letter dated the 24th June last, I have the honour to inform you that under the existing rules no deduction is allowed for any amount set aside by a Company for depreciation of buildings. I would, therefore, thank you to furnish me with the Balance-sheet and Profit and Loss Account of the Company for the year ended 31st December 1902 at your early convenience.

I have, &c.,
H. C. COORLAWALLA,
Income-tax Collector, Bombay.

THE TEXTILE MANUFACTURING CO., LD.,
BOMBAY, *14th September* 1903.

THE SECRETARY,
BOMBAY MILLOWNERS' ASSOCIATION.

DEAR SIR,

We addressed the Income-tax Collector again on the 10th instant about the rules in force for not allowing deductions on account of depreciation in the value of buildings in determining the net profits of the Joint Stock Companies for the purposes of Income-tax assessment, and he has replied as per enclosed copy.

We trust you will circulate the reply with our original letter dated the 1st instant to the Committee and take up the matter and rememorialize Government on the subject.

We are, etc.,
For the Textile Manufacturing Co., Ld.,
NOWROSJEE WADIA & SONS,
Agents.

True Copy.

No. 3435 of 1903-1904.

INCOME-TAX OFFICE,
BOMBAY, 11*th September* 1903.

MESSRS. NOWROSJEE WADIA & SONS,
AGENTS, THE TEXTILE MANUFACTURING CO., LD.,
BOMBAY.

GENTLEMEN,

With reference to your letter dated the 8th ultimo, I have the honour to inform you that at the request of the Secretary of the Millowners' Association, Bombay, the question of allowing deduction on account of depreciation in the value of buildings in determining the net profits of Joint Stock Companies for the purposes of Income-tax assessment under Part II, was referred to Government, and the Government were pleased to rule that in determining the net profits of cotton mills and other Joint Stock Companies for the purposes of Income-tax assessments, deductions should not be allowed on account of depreciation in the value of buildings owned by Companies. This ruling was communicated to the Secretary of the Millowners' Association, Bombay, in my letter No. 1364, dated 14th August 1897.

I have, etc.,
H. C. COORLAWALLA,
Income-tax Collector, Bombay.

THE MILLOWNERS' ASSOCIATION,
BOMBAY, 8*th October* 1903.

THE SECRETARY, JUTE MILLS ASSOCIATION, CALCUTTA.

DEAR SIR,

I am directed by the Committee of the Bombay Millowners' Association to communicate with you on the subject of the refusal of Government to allow any deduction on account of depreciation of factory buildings to be made in determining the net income assessable to Income-tax, and to ask whether your $\frac{\text{Association}}{\text{Chamber}}$ would be prepared to support a representation to Government in the matter.

2. In 1897 correspondence upon this subject was undertaken with the Collector of Income-tax in Bombay, and Government then ruled that no such deduction should be allowed. The matter was not pressed at that time; but representation has again been made to the Committee regarding it, and the principle involved seems to them so clear and so important that they propose to address the Government afresh, requesting either that a reasonable deduction for depreciation of buildings should be allowed or that some statement should be made of the grounds on which Government refuses to do so.

3. In the previous correspondence alluded to it was stated that the Government of the North-West Provinces, working under the same Act as exists in Bombay, allow deduction of 2½ per cent. on this account; and I am directed to beg that you will inform me what practice on this point exists in Calcutta. I am to mention that the British Government is understood to allow a similar deduction to be made. The Government of India have declared that in determining the net income assessable to the Income-tax such charges as are necessarily incurred for the purpose of deriving the income, and for the purpose of providing against destruction of the Capital from which such income is derived (in other words, insurance charges actually incurred) are allowed. My Committee are unable to imagine on what principle a provision against the inevitable destruction of Capital by the process of deterioration should be denied an exemption accorded to a

See Circular letter No. 71. *N.B.*—1 from the Joint Secretary, Board of Revenue, North-West Provinces and Oudh, dated 27th October 1892.

comparatively speculative provision against a loss of Capital by fire which may or may not occur ; and they believe that on this ground a simultaneous representation by the various industrial Associations in India would be likely to succeed. I am to say that a similar letter has been addressed to the Millowners' Association, Ahmedabad, and the Upper India Chamber of Commerce, Cawnpore, and that any information received from these bodies will be held at your disposal.

I have, etc.,
FREDERICK NOEL-PATON,
Secretary.

Similar letters to Millowners' Association, Ahmedabad, and the Upper India Chamber of Commerce, Cawnpore.

No. 92 D.

INDIAN JUTE MILLS ASSOCIATION,
ROYAL EXCHANGE BUILDING,
CALCUTTA, 17*th October* 1903.

THE SECRETARY,
BOMBAY MILLOWNERS' ASSOCIATION, BOMBAY.

DEAR SIR,

I am directed by the Committee of the Indian Jute Mills Association to acknowledge the receipt of your letter dated 10th instant on the subject of the refusal of Government to allow any deduction on account of depreciation of factory buildings to be made in determining the net income assessable to Income-tax. You ask whether this Association would be prepared to support a representation to Government in connection with the matter, and you enquire as to the practice adopted in Calcutta in regard to the point under reference.

Your letter has had the attentive consideration of the Committee, and I am directed to state in reply that the practice followed by the authorities here is to allow from profits a deduction of 5 per cent. against depreciation of mill buildings and machinery. Renewals of machinery, etc., are included in the deduction of 5 per cent. This deduction must be shewn in a Company's accounts. If a less sum be set aside for the purposes named, that sum only is allowed by Government as a deduction from profits in ascertaining the amount to be assessed.

The point raised by your Association is a simple one, *viz.*, the fixing by Government of a rate of depreciation on buildings only. But, in connection with this question, there will most probably have to be considered the larger question of the manner in which the Act is applied in Bombay generally. Before agreeing to support a representation to Government in connection with the matter the Committee of this Association would, for the above reason, like to have further information on the subject.

Yours faithfully,
H. M. HAYWOOD,
Acting Secretary.

THE AHMEDABAD MILLOWNERS' ASSOCIATION,
AHMEDABAD, 12*th October* 1903.

To
THE SECRETARY,
THE MILLOWNERS' ASSOCIATION,
BOMBAY.

DEAR SIR,

With reference to your letter of the 8th instant I beg to inform you that the local Millowners' Association will be prepared to support any representation to Government your Association makes on the point of allowing a reasonable deduction on account of depreciation of factory buildings to be made in determining the net income assessable to Income-tax, and our Association will represent the matter to Government, if required, independently of your Association.

The local mills also moved in the matter, and the result was that only all the actual repairing charges incurred are deducted before determining the net income assessable to income-tax.

I shall feel obliged by your sending me copies of letters received in reply to this inquiry from different bodies.

Yours faithfully,
MANGALDAS G. PAREKH,
Hony. Secretary,
The Ahmedabad Millowners' Association.

UPPER INDIA CHAMBER OF COMMERCE,
CAWNPORE, *4th November* 1903.

THE SECRETARY,
BOMBAY MILLOWNERS' ASSOCIATION,
BOMBAY.

DEAR SIR,

I am directed to acknowledge receipt of your letter of 8th ultimo, and in reply to state that my Committee regret that they do not see their way to join you in the representation which you propose making to Government in the matter.

As regards the 2½ per cent. allowance for depreciation on factory buildings in assessment to Income-tax in force in these Provinces, I beg to refer you to the correspondence published in this Chamber's Report for 1898—*vide* Appendix K, pages 71 to 77.

Yours faithfully,
W. B. WISHART,
Secretary.

CORRESPONDENCE REFERRED TO.

Copy of a letter No. B. O. $\frac{259}{IV-B-1}$*, dated the 30th November* 1897, *from the Secretary to the Board of Revenue, North-Western Provinces and Oudh, to the Secretary to Government, North-Western Provinces and Oudh, Separate Revenue (Income-tax) Department.*

I am directed to acknowledge the receipt of G. O. No. $\frac{328}{XIII-101}$, dated 22nd October 1897, and annexures, asking for a report as to the rule obtaining in Cawnpore of allowing a deduction of 2½ per cent. on account of depreciation on the capital value of buildings used in the business of a Company in assessing its profits to Income-tax.

2. The rule in question was proposed by the Collector of Cawnpore, and was, on the recommendation of the Board, sanctioned by Government in G. O. No. $\frac{162}{XIII-101}$ of 23rd September 1892. Such a rule does not, it is understood, exist in any other Province in India or in England, and the reasons urged in its favour in 1892 do not appear to the present Board to be strong enough to warrant a departure from the general practice. The rule generally observed in these Provinces is laid down in Board's Ruling No. 91(1) printed at page 124 of the Income-tax Manual, and runs as follows :—

> "In cases where the buildings belong to the Firm or Company, one-sixth of the assumed rental should be deducted for ordinary repairs, and deduction should be made for special and extraordinary repairs in addition to the allowance for ordinary repairs, only on proof of their cost having been expended in addition to the allowance."

The Board see no reason why this ruling should not be followed in Cawnpore also.

3. I am to add that it has been ascertained that the rule in force in Bombay is much the same as that above quoted. There, as in these Provinces, deductions are allowed on the actual cost of all repairs, save additions and renewals ; the only difference being that while here for ordinary annual repairs the deductions is calculated at one-sixth of the assessed rental, as a matter of convenience and on the analogy of the practice followed in assessing the houses of the occupying owners (*vide* Board's Ruling No. 14 at page 106 of the Income Tax Manual), in Bombay the actual expenditure on repairs has to be ascertained for deduction.

Copy of B. O. No. $\frac{85}{IV-B-1}$, *dated the 5th April* 1898, *to the Commissioner of Allahabad Division.*

With reference to your No. $\frac{2064}{IV-7}$, dated 25th February 1898, and annexures, I am directed to forward a copy of G. G. O. 4124 S. R., dated 15th September 1897, and of its enclosures, and to say that before passing final orders, the Local Government desires to be informed of the views of the Upper India Chamber of Commerce on the alteration in the method of assessing the profits of Companies to Income-tax recommended in this office letter No. $\frac{259}{IV-B-1}$, dated 30th November 1897, a copy of which was sent to you under cover of No. $\frac{7}{IV-B-1}$, dated 15th January 1898. I am accordingly to request that the Chamber may be asked whether it has any cause to show why the proposals made by the Board should not be given effect to.

No. $\frac{34666}{IV-7}$, dated 15th April 1898.

The foregoing with enclosures to be returned forwarded to the Collector of Cawnpore for early communication of the views of the Upper India Chamber of Commerce, with reference to correspondence ending with Collector's No. $\frac{1920}{IV-B-137}$, dated the 19th February last. A copy of the Board's letter No. $\frac{259}{IV-B-1}$, dated 30th November 1897, was forwarded to Collector with this office endorsement No. $\frac{604}{IV-7}$, dated 21st January 1898.

No. 2926, dated Cawnpore, the 20th April 1898.

Copy with enclosures in original (return requested) and a copy of B. O. No. $\frac{259}{IV-B-1}$, dated 30th November 1897, forwarded to the Secretary of Chamber of Commerce, Cawnpore, for favour of an early expression of opinion on the part of the Committee of the Chamber.

(Sd.) W. A. TRETHEWY,
Collector.

Copy of letter No. 4124 *S. R., dated Simla, the* 15*th September* 1897, *from the Officiating Under-Secretary to the Government of India, Finance and Commerce Department, to the Secretary to Government, North-Western Provinces and Oudh.*

I am directed to forward a copy of a letter from the Government of Bombay, No. 3096A, dated the 7th August 1897, and its enclosures, regarding a practice which is said to prevail in the North-Western Provinces of allowing for depreciation in the value of buildings in estimating the profits of Joint Stock Companies for the purposes of assessment to Income-tax.

2. I am to say that the practice hitherto followed by the Government of India has been to permit the Local Governments to prescribe in such matters as those under reference the manner of ascertaining and determining the income liable to assessment, and this policy it seems desirable to continue. The Government of India are not prepared to ask any Local Governments to assimilate its instructions on any particular detail in regard to the working of the Income-tax Act to those of any other Government, and it is quite possible that systems of assessment (which involves the consideration of many minute points) may, though differing in details, lead on the

whole to similar results. But the allowance which is the subject of the complaint of the Mill-owners' Association, Bombay, would appear, from paragraph II of the letter from the Joint Secretary to the Board of Revenue, to the Government of the North-Western Provinces and Oudh, No. 407, N. V. S. 10, dated the 27th May 1891, to be peculiar to the district of Cawnpore, and it may be desirable to consider the question of the fairness of the deduction, even though it is not made in addition to any actual costs of repairs, renewal, or maintenance of buildings.

3. I am therefore to ask that, with the permission of His Honour the Lieutenant-Governor and Chief Commissioner, the Government of India may be favoured with a report on the subject.

Copy of letter No. 3936 A, dated Bombay Castle, the 7th August 1897, from the Chief Secretary to the Government of Bombay, Financial Department, to the Secretary to the Government of India, Finance and Commerce Department.

I am directed to forward, for such action as may be necessary, extracts from a letter* addressed by the Secretary, Millowners' Association, Bombay, to the Collector of Income tax, Bombay, and from one † addressed by the latter to this Government, regarding the practice prevailing in the North-Western Provinces of allowing deductions on account of depreciation in the value of buildings owned by Joint Stock Companies in determining the net profits of such Companies for the purposes of assessment under Part II of the Income-tax Act, II of 1886. I am to observe that no such deduction is allowed in this Presidency, and to request that the Government of India may be moved to issue such orders as may secure uniformity of practice as far as possible.

* Dated 15th May 1897.
† No. 1053, dated 10th July 1897.

Extract, paragraph 2, of a letter from the Secretary, Millowners' Association, Bombay, dated the 15th May 1897.

2. I am further directed to draw your attention to the fact that, while in Bombay, depreciation at the rate of 5 per cent. on Mill Machinery is an allowed deduction in assessing profits for Income-tax, no depreciation has hitherto been allowed on buildings. That such depreciation does take place is undoubted, and the Committee are unaware why any difference should be made as between machinery and buildings. Moreover, the Government of the North-Western Provinces, working under the same Income-tax Act, allow a deduction for depreciation on buildings of two and a half per cent., and it is difficult to conceive that one Government should have the power to make this concession, while another Government has not. Naturally, any concession of this kind operates to the advantage of Factories in the North-Western Provinces in competition with Bombay Mills. The total difference may be small, but in principle it is indefensible, and the Committee of the Association trust that if you are unable to make this concession, as also the concession in the matter of halalcore cess, you will refer the question to Government for decision.

Extract, paragraphs 3 and 4, of the letter from the Collector of Income-tax, Bombay, No. 1053, dated 10th July 1897.

3. As regards the question of allowing deduction on account of depreciation in the value of buildings, it will be seen, on a reference to the letter from the Government of India, embodied in the Government Resolution, Financial Department, No. 559, dated 19th February 1887, that deductions on account of depreciation and renewal funds are to be allowed only on machinery and plant, and not on account of depreciation of buildings. In England the Income-tax authorities allow deduction on account of depreciation in machinery only, and do not allow deduction on account of depreciation on buildings, and I believe all the Provinces of India, excepting the North-Western Provinces, follow the English procedure. There is some force in the argument

advanced in the concluding portion of Mr. Marshall's letter that the Government of the North-Western Provinces allow a deduction for depreciation of Mill buildings, and that this concession operates to the advantage of factories in the North-Western Provinces in competition with Bombay Mills. But as there are only five Cotton Mills at work at present in the North-Western Provinces against 69 in this city, I do not think the Bombay Mills are placed at a very great disadvantage in this respect. The deterioration which the machinery undergoes is far greater than in buildings, which are very slightly, if at all, affected in this respect. For this reason the Income-tax Acts in England do not recognise the depreciation in buildings.

4. I am respectfully of opinion that as the Mill Companies in Bombay already get a very liberal allowance on account of depreciation in machinery, they are not justified in asking for any allowance for depreciation in Mill buildings which undergo very slight, if at all, deterioration.

$\frac{328}{XIII-101}$ OF 1897.

SEPARATE REVENUE (INCOME-TAX) DEPARTMENT.

Dated Naini Tal, the 2nd October 1897.

Copy forwarded to the Secretary to the Board of Revenue, North-Western Provinces and Oudh, for favour of report by the Board.

By Order, &c.,
(Sd.) R. BURN,
Under-Secretary to Government,
N.-W. P. & Oudh.

From Chamber, to the Collector of Cawnpore, dated July 14th, 1898.

Allowance for Depreciation on Buildings in Assessing Income-tax.

I beg to return herewith the correspondence forwarded under your office endorsement No. 2926 of the 20th April last regarding the rule obtaining in Cawnpore under which a deduction of 2½ per cent. is allowed on account of depreciation on the capital value of buildings used in the business of a Company in assessing its profits. I am at the same time to express the Committee's regret at the delay that has taken place in answering your communication: this has occurred in connection with certain enquiries set afoot by the Chamber as to the custom prevailing throughout the Presidencies of Bombay, Bengal and Madras, as also in the various towns in these Provinces and in the Punjab.

2. So far as the Committee have been able to ascertain, the basis on which depreciation is allowed on the value of buildings in their assessment to Income-tax, varies not only in each Presidency and Province, but in the different towns in each, and it appears to be determined, generally, on the considerations of special local circumstances and conditions.

This procedure is strictly in accord with the policy of the Government of India, to permit Local Governments to prescribe in such matters as those under reference, the manner of ascertaining and determining the income liable to assessment. It is also in accord, apparently, with the method practised in England, such matters being left to the decision of *local* Income-tax Commissioners.

Vide letter No. 4124-S. R., dated 15th September 1897, from the Finance & Commerce Dept., Govt. of India, to Govt., N.-W. P. & Oudh.

3. The Committee see no good reason why the policy should be upset, unless the Government of India hold it desirable that local circumstances and conditions are to be ignored, and one uniform scale adopted for the whole of India and for all buildings employed in connection with mercantile enterprise, irrespective of the class of material employed, or the nature of the business carried on.

4. The Board of Revenue, North-Western Provinces and Oudh, propose that the local Government should change the method of assessment hitherto in force, and adopt in lieu the system of deducting one-sixth of the assumed rental, *plus* actual expenditure on special repairs, if any.

5. The obvious objection to such a system is that there would never be unanimity in deciding what was a fair and reasonable basis on which to calculate the rent. This would conduce to contentious correspondence between factory owners and the authorities, whereby much avoidable friction would be engendered.

6. Moreover, the proposed change is not one that is likely to be beneficial to Government. To give a case in point: the cost of the land and buildings of a certain Mill in Cawnpore stood, on the 31st December last, in round numbers, at Rs. 8,00,000. Taking 12 per cent. as the average rental of buildings in Cawnpore, Rs. 96,000 would be the assumed rental and one-sixth of the latter sum is Rs. 16,000. The actual amount allowed for depreciation in 1897 was only Rs. 14,723.

7. It is unquestionable that there is depreciation in all buildings, arising not from wear and tear alone, but also from the process of natural decay, which constitutes virtually as much an incident in the expenses of management as the outlay for wages and material, though less direct and apparent. Then residual value is a factor to be considered. Many buildings undergo renovation or alteration by reason of their being no longer suited to the purpose for which they were erected. If this renovation or alteration were not carried out the buildings would be useless, and so far from contributing towards earnings might as well have never existed. Again a well-constructed fireproof Mill, occupying a central position in a populous town, may generally be held to have a rental value apart from the particular business carried on in it. This, however, is far from being so in some provincial towns and isolated points in the mofussil where, in the majority of cases, a factory building would become, to all intents and purposes, useless and its selling value practically *nil*, if the trade or undertaking carried on in it were to cease, and in such instance it is obvious that the money value of a building is not a fixed sum, not liable to depreciation.

8. The Collector of Income-tax, Bombay, draws attention to the fact that "In England the Income-tax Authorities allow deduction on account of depreciation in Machinery only, and do not allow deduction on account of depreciation in buildings."

Letter from Collector to Govt. of Bombay, No. 1053 of 10th July 1897.

It seems unfair, however, to institute this comparison, seeing that the Income-tax, generally speaking, is admittedly administered in a much more liberal spirit and on less arbitrary lines than is the case in India, both as regards the taxation of private individuals, as well as the assessment of the net profits of trading concerns.

9. In further connection with, and as having a bearing on, the points at issue, I am directed to forward the attached extracts from a book entitled "Depreciation of Factories," which is accepted as a standard authority by Insurance Companies and others in Great Britain; these demonstrate clearly that a depreciation in factory buildings does take place to a material extent, and that Insurance Companies claim a deduction on account of such depreciation in assessing the value of a building destroyed by fire. Such an allowance therefore can hardly be objected to on the ground that "Mill buildings undergo very slight, if at all, deterioration."

Vide letter from the Collector to the Govt. of Bombay, No. 1053 of 10th July 1897.

10. The Committee consider that, whatever may be the case as regards Calcutta and Bombay, the decision arrived at by the Board of Revenue in 1892 on the subject under reference was fair and equitable; Government have not lost by it, and it is hoped that the matter will be allowed to rest.

(*Extracts from* "*The Depreciation of Factories*," *by* EWING MATHESON, M. Inst., C.E.)

"In reckoning the proper rate of depreciation for buildings of brick or stones, they may be divided broadly into two classes, as those subject only to ordinary deterioration from time and weather, and those which suffer also from abrasion, concussion, or other special incidents of working." Pages 27, 28.

* * * * * * * * * *

"And even in lighter trades, if quickly running shafting or machinery be attached to the walls or roof framing, the effect on the buildings may be injurious."

* * * * * * * * * *

"1¼ per cent. would suffice in the 1st Class."

"† 4 per cent. might be appropriate for the 2nd Class."

* * * * * * * * * *

"In most factories an average of 1½ per cent. for buildings will generally be found appropriate, if due attention is paid to repairs."

* * * * * * * * * *

"Buildings of wood or iron would require a higher rate ranging from 4 to 10 per cent."

"An Insurance office does not undertake to reinstate or to provide new buildings and plant in the place of old ones." Page 84.

A deduction is made for depreciation.

"In regard to deductions which may be claimed by the Insurance office on account of the worn condition of the buildings and plant, the assured may be called upon to furnish information as to the length of time the factory and plant, or any part of them, have been in operation."

"Factories are rated for the Relief of the Poor on their net annual value. To arrive at this value, the gross rent that a tenant would pay is ascertained or estimated, and a certain proportion of it is deducted for repairs, maintenance, fire insurance, and other charges which, taking an average of years would have to be provided for before an annual net profit can be reckoned." Page 89.

Copy of G. O. No. $\frac{294}{\text{XIII-101}}$, *dated the* 19*th November* 1898, *to Board of Revenue, North-Western Provinces and Oudh.*

I am directed to acknowledge the receipt of your letter No. $\frac{200}{\text{IV-B-1}}$, dated the 8th August 1898, forwarding a copy of a letter from the Secretary, Upper India Chamber of Commerce, Cawnpore, expressing the views of the Chamber regarding the methods followed in these Provinces of allowing for depreciation in the value of buildings in estimating the profits of Joint Stock Companies for the purposes of assessment to Income tax.

2. With reference to the correspondence in which this question was raised, I am to forward, for the information of the Board, a copy of this Government's letter No. $\frac{234}{\text{XIII-101}}$, dated the 6th September 1898, to the address of the Government of India, Finance and Commerce Department, and of a letter from that Government (No. 4678-S. R., dated the 27th October 1898) to the Government of Bombay.

The Government of India have decided to maintain the existing practice of allowing a discretion to Local Governments in prescribing the manner of ascertaining and determining the income liable to assessment.

3. In their letter under reply, the Board recommended the extension of the ordinary rule regarding the depreciation of buildings in force in these Provinces to Cawnpore. The Upper India Chamber of Commerce have objected to this extension, and one disadvantage of the ordinary rule is the difficulty of assessing annual rental referred to in paragraph 3 of the Government of India's letter of October 27th. I am, in these circumstances, to say that in His Honour the Lieutenant-Governor's opinion it is unnecessary to substitute the ordinary rule as recommended by the Board for that already in force in Cawnpore.

† In this class might be included Cotton Mills.

No. 878, *dated Cawnpore, the* 12*th December* 1898.

Copy of the foregoing forwarded to the Secretary, Chamber of Commerce, for information, with reference to correspondence ending with his letter dated 14th July 1898.

A. W. TRETHEWY,
Collector.

MILLOWNERS' ASSOCIATION,
BOMBAY, 11*th December* 1903.

THE COLLECTOR OF INCOME-TAX,
BOMBAY.

SIR,

Renewed complaints have been received from Members of this Association as to the refusal of your Department to allow, in determining the net profits on factories, any deduction on account of depreciation in buildings.

2. You will remember that this question was the subject of correspondence between you and the Association in 1897 and that, by a letter No. 1364, dated 14th August of that year you communicated the decision of Government that such deductions were to be disallowed. The Committee at that time did not pursue the matter presumably because they assumed that the ruling of Government had been given in the full knowledge of the practices in force in the United Kingdom and elsewhere. They had themselves, in their letter of the 15th May of that year, pointed out that the Government of the North-West Provinces allowed 2½ per cent. deduction on this account; and the arguments on which they had relied in soliciting a similar concession in Bombay appeared to them inherently so unassailable that the failure of Government to give effect to them was not improbably taken as indicating a simple determination to admit no argument on the subject. It may be added that in Calcutta a deduction of 5 per cent. on Building and Machinery is allowed.

3. It has come to the knowledge of my Committee that in your letter to Government No. 1053, dated the 10th July 1897, on which the said orders of Government were presumably passed, it was stated that "In England the Income-tax authorities allow deduction on account of depreciation in machinery alone, and do not allow deduction on account of depreciation on buildings." It seems probable that this assurance contributed largely to the decision of Government; and it is no doubt now in your knowledge that as a matter of fact the Income-tax authorities in the United Kingdom do allow a deduction of 2½ per cent. in respect of depreciation in factory buildings. Since the principle for which the Association contended is thus recognised in a country where such principles are most exhaustively considered, my Committee think it would be unnecessary to re-state the grounds of their contention at length. They desire me, however, to refer to the broad principle laid down by the Government of India for the guidance of the Local Governments, namely, that in determining the net income assessable to the Income-tax, allowance should be made for such charges as are necessarily incurred for the purpose of deriving the income, and for the purpose of providing against the destruction of the capital from which such income is derived. My Committee think it will not be denied that buildings in India, and especially mill buildings subjected to continual vibration and traffic, undergo a deterioration that will not be covered by an allowance of 2½ per cent. It is equally clear that such deterioration is in fact a destruction of capital and that the repair of this deterioration is perfectly indispensable to the continued deriving of the income. My Committee are unable to imagine on what principle a provision against an inevitable destruction of capital by the process of deterioration should be denied an exemption which is accorded to a provision against a possible destruction of capital by fire. My Committee consider that the

present system puts a premium upon bad finance as well as subjecting them to a charge which is absolutely and relatively unjust. They accordingly direct me to beg that you will be good enough to refer the question again to Government for reconsideration.

I have, &c.,
FREDERICK NOEL-PATON,
Secretary.

No. 4423 of 1903-1904.

INCOME-TAX OFFICE,
24, ESPLANADE ROAD,
BOMBAY, 14*th December* 1903.

To

FREDERICK NOEL-PATON, ESQ.,
SECRETARY, MILLOWNERS' ASSOCIATION,
BOMBAY.

SIR,

I have the honour to acknowledge the receipt of your letter dated 11th instant and to state that it will receive my careful attention.

2. Meanwhile I am to request the favour of your giving me an interview, at this office on Thursday next, the 17th instant, at 2 p.m., when I shall be glad to discuss the matter with you.

I have, &c.,
H. C. COORLAVALA,
Income-tax Collector, Bombay.

MILLOWNERS' ASSOCIATION,
BOMBAY, 16*th December* 1903.

H. C. COORLAVALA, ESQ.,
INCOME-TAX COLLECTOR,
BOMBAY.

SIR,

I am in receipt of your letter No. 4423 of the 14th instant, and will be pleased to see you to-morrow (Thursday) at 2 p.m.

I have, &c.,
FREDERICK NOEL-PATON,
Secretary.

MILLOWNERS' ASSOCIATION,
BOMBAY, 14*th December* 1903.

THE SECRETARY,
THE INDIAN JUTE MILLS ASSOCIATION,
CALCUTTA.

DEAR SIR,

In acknowledging with thanks the receipt of your letter No. 92-D of the 17th October 1903, I am directed to hand you a copy of a communication, addressed by the Committee of the Bombay Millowners' Association, on the subject of the refusal of the Bombay Government to allow deduction on account of factory buildings in the determination of Income-tax.

I have, &c.,
FREDERICK NOEL-PATON,
Secretary.

MILLOWNERS' ASSOCIATION,
BOMBAY, 14*th December* 1903.

THE SECRETARY,
THE UPPER INDIA CHAMBER OF COMMERCE,
CAWNPORE.

DEAR SIR,

I am directed to acknowledge with thanks the receipt of your letter of the 4th ultimo, with its accompaniments, on the subject of the refusal of Government to allow any deduction on account of depreciation of factory buildings to be made in determining the net income assessable to Income-tax.

I have, &c.,
FREDERICK NOEL-PATON,
Secretary.

No. 115-D.

INDIAN JUTE MILLS ASSOCIATION,
CALCUTTA, 19*th December* 1903.

THE SECRETARY,
THE MILLOWNERS' ASSOCIATION,
BOMBAY.

DEAR SIR,

Income-tax deduction on account of depreciation of factory buildings.

I am directed by the Committee to acknowledge with thanks the receipt of your letter dated 14th December forwarding a copy of a representation which your Committee have addressed to the Collector of Income-tax, Bombay, upon this question. The Committee have read the representation with much interest, and trust that it will be successful.

I have, &c.,
H. M. HAYWOOD,
Assistant Secretary.

Appendix K.

Bonus and Accident Fund and Permanent Dispensaries for Mill-hands.

Memorandum submitting a scheme for the establishment of (1) a *Bonus and Accident Fund*, and (2) *Permanent Dispensaries* for mill-hands.

At the last Annual Meeting I alluded to the necessity of devising some scheme that would interest the mill-hands in the prosperity of the concerns to which they belonged, and suggested the establishment of Provident or Compassionate Funds. My object was that we should make a systematic endeavour to improve the condition and prospects of the operatives, and increase their efficiency. The time seems favourable for the consideration of the subject, as, fortunately our attention is not distracted at the present moment by any untoward circumstances affecting the industry as a whole. I, therefore, submit the following proposals for the favour of revision or approval by the Committee, and would leave it to those interested to adopt them, or not, as best suits their views :—

I have given a great deal of thought to the question of creating a "Permanent Financial link between employer and employed," but I have, I confess, come to the conclusion that the establishment of Provident Funds, as a step in that direction, cannot be undertaken in the case of mill-hands. There are almost insuperable difficulties in the way. For instance—

(1) When a Provident Fund is started the employés contribute something and the employers add their share to that. But the contributions of the mills towards the Fund cannot be relied upon as a fixity. At times some of the mills might show losses at the end of the year, and the shareholders cannot be expected to acquiesce, under the circumstances, to an augmentation of the deficit involved.

(2) It would be difficult to get the mill-hands to recognise the advantages of the scheme even if the difficulty pointed out in para. (1) did not exist. The Central India Mills (Nagpur) started a Provident Fund in 1901, and, I understand, that a similar fund is to be started for the Swadeshi Mills in Bombay.

In the hands of Messrs. Tata & Co., as regards the Nagpore Mills, as a particular arrangement, the scheme might be carried to a successful issue, but as regards Bombay we have to reckon with a class of labourers who are very backward and ignorant, and also suspicious of innovations, and who would not appreciate the idea of paying one pice now in order to get two, (with interest) after several years, and that also on certain conditions. That is my individual opinion.

(3) There are also some legal difficulties that will have to be surmounted in connection with the Articles of Association of the majority of the mills, as they are not empowered to sanction any contribution of the nature contemplated from the funds of the Company. This, together with the trouble and bother of keeping separate ledger accounts for each operative, will deter many millowners and agents from undertaking such a scheme.

(4) The idea of starting a Pension Fund is not applicable to our mill-hands. It is quite probable that they will look upon it as a *bundobust* to get more work out of them on the strength of a mere promise. They have seen mill after mill go into liquidation, and have, in some instances, been unable to recover the wages to which they were lawfully entitled.

For these reasons our operatives are not likely, on the whole, to coöperate with us in any scheme which does not promise immediate results, or which entails an outlay on their part, and it would be useless to expect them to understand and appreciate the principles that guide our actions.

We can, however, do a great deal of good, all round, by carrying out such measures as are feasible and ready to hand. Briefly then I would suggest that every mill which approves of the idea should start a

BONUS AND ACCIDENT FUND.

(1) Such a fund can be provided by setting aside from the earnings of each year in which a dividend is to be declared a certain percentage of the profits. If a mill earns, say Rs. 50,000, it can appropriate, for the Bonus and Accident Fund, from this amount, Rs. 1,500 or Rs. 2,000.

(2) The fund and all accumulations thereof may be employed for the purposes of the Company in the same manner as any other moneys belonging to them, and should carry interest at say, 5 per cent. per annum.

(3) The fund is to be used for the purposes of—

(*a*) Giving annual, or bi-annual, bonuses to deserving operatives for regular attendance.

(*b*) Giving monetary aid in case of accidents or loss of life.

(*c*) In case of illness.

(*d*) In case of emergencies.

The payments would be made at the discretion of the Manager who will act under instructions from the owners or agents.

(4) The amounts to be paid in case of accidents would vary according to the circumstances of each case. A gift of, say, Rs. 25 to a man who sustains a nasty fall, or Rs. 50 or Rs. 75 to one who has lost a limb, or Rs. 100 or Rs. 150 to the family of one who loses his life through an accident, would be very highly appreciated by all the operatives. It would raise their *morale* by giving them confidence and would convince them that they are looked after, while the lump sum given as a sort of compassionate allowance in case of loss of life would prove an inestimable boon to the relatives of the deceased. In case of serious illness a little *buksheesh*, to deserving workmen, would go a long way to attach them to their work. The utility of immediate money grants would be thoroughly recognised by all the operatives, and they would, I believe, appreciate the aid given far better than any other mode of providing for them for which they are not yet ripe.

Besides the above, I would propose to those who are inclined to give the idea a trial the establishment of

PERMANENT DISPENSARIES

for the operatives. The funds required for this purpose can be raised by deducting, say, one pice per rupee of wage earned. A mill with a pay-sheet totalling, say, Rs. 10,000 per month (for workmen's wages only) would have a sum of Rs. 156 every month for establishment expenses and medical stores and appliances. This would include the salary of a qualified Medical man who would attend a well equipped permanent dispensary for a couple of hours every day on which the mill is open, to see such patients as do not require indoor hospital treatment.

The money belonging to this fund should not be utilised for any other purposes, and if any surplus accrues at the end of a certain period no deduction should be made from the wages until such surplus is exhausted.

The benefit to be derived by the establishment of the dispensary would, in my opinion, be so well appreciated by the operatives that I am persuaded that they would willingly contribute the 3 or 4 annas per month per head required for the purpose.

So long as the benefit is direct and immediate there is every chance of the operatives viewing it with favour and coöperating with us for the common good.

This is a rough sketch of my views on this subject, and I am so far convinced of the usefulness of the measures suggested that I hope I shall be able to put them into practice in our mills as soon as the preliminary arrangements would permit of our doing so. Of course the proposal referred to cannot be made compulsory in respect of all the mills, but having alluded to the subject at the last annual meeting, I take this opportunity to lay my views before the Association, so that they might be adopted by those who approve of them.

I may add in conclusion that, as some mills have already in existence Provident Funds for the Manager and his staff and the heads of the departments, the extension of the scheme to other mills who can see their way to adopt it is worth considering.

SASSOON J. DAVID.

6th August 1903.

PENSION AND PROVIDENT FUND

OF THE

CENTURY SPINNING AND MANUFACTURING COMPANY, LTD.

Brought into operation 1st July 1904.

RULES.

1. For all permanent servants of the Company, to whom alone these rules shall apply, a Provident Fund shall be established to be maintained partly by their own and partly by contributions from the Company.

2. Subject to Rule 4, subscriptions to the Fund shall be compulsory on all servants drawing Rs. 30 (Rupees thirty) per month and over.

3. Servants drawing under Rs. 30 (Rupees thirty) per month shall have the option of joining the Fund.

4. The Company, acting through its Agents, reserves to itself the right to exclude any servant from joining the Fund.

5. Subscriptions of servants shall be at the following rates :—

	Rs.	Rs. a. p.
Salary per month	10	0 8 0 per month.
Do. do.	20	1 0 0 do.
Do. do.	30	1 8 0 do.
Do. do.	40	2 0 0 do.
Do. do.	50	2 8 0 do.
Do. do.	60	3 0 0 do.
Do. do.	70	3 8 0 do.
Do. do.	80	4 0 0 do.
Do. do.	90	4 8 0 do.
Do. do.	100	5 0 0 do.
Do. do.	120	6 0 0 do.
Do. do.	140	7 0 0 do.
Do. do.	160	8 0 0 do.
Do. do.	180	9 0 0 do.
Do. do.	200	10 0 0 do.
Do. do.	250	12 8 0 do.
Do. do.	300	15 0 0 do.
Do. do.	350	17 8 0 do.
Do. do.	400	20 0 0 do.
Do. do.	450	22 8 0 do.
Do. do.	500	25 0 0 do.
Do. do.	600	30 0 0 do.
Do. do.	700	35 0 0 do.
Do. do.	800	40 0 0 do.
Do. do.	900	45 0 0 do.
Do. do.	1,000	50 0 0 do.

N.B.—Any person drawing salary intermediate in amount to any of the above figures shall pay a subscription to the Fund as if he were drawing a salary equal to the lower figure; thus a man drawing Rs. 45 shall pay his contributions as if he were drawing Rs. 40 for the purpose of the Fund.

6. These rules shall come into operation on the 1st July 1900. The Company reserves the right from time to time to alter these rules by a resolution of the Board, and every such alteration shall come into operation from the date of the resolution whereby such alteration shall have been made. The decision of the Company, through its Board, of all matters and questions arising under or out of these rules, shall be final and binding on all persons affected thereby.

7. The Company's contribution shall be at the rate of 100 per cent. per centum of every subscriber's contribution, and shall be made yearly on 31st December except in the case of a subscriber's death, when the Company's contribution shall be made on that of the subscriber up to the time of his death.

8. Separate accounts shall be kept for each subscriber showing in the first place the amount of his own personal subscriptions with the interest thereon as it accrues, and in the next his share of the Company's yearly contribution with interest thereon.

9. Interest shall be allowed by the Company on all the payments to the Fund by the subscribers, and also on the Company's contribution at 5% (five per cent.) per annum, to be credited yearly on or about the 31st December.

10. Subscribers shall serve the Company 20 years in order to entitle them to receive their shares of the Company's contributions, provided that no contribution can be claimed until the contributor retires from the service of the Company and does not take a service at a competing mill or works.

11. In the event of retirement before the completion of that period, subscribers shall receive the amount of their own subscriptions only with interest thereon but shall not receive their shares of the Company's contribution.

12. The Company shall have the power in case the retirement is necessitated by certified incapacity for further service, or other cause beyond the subscriber's control to waive forfeiture by such subscriber of the share of the Company's contribution.

13. Taking any part in any strike or dismissal for misconduct shall entail absolute forfeiture of all claim on the Fund, whether in respect of the subscriber's subscriptions or of contribution of the Company.

14. The Company shall have power, in cases in which misconduct is not criminal, to allow subscribers dismissed for misconduct to receive the amount of their own subscriptions only, with or without interest as the Company may decide.

15. In the event of the death of any subscriber while in the service of the Company or before his claim on the Fund shall have been discharged the Company shall hold the amount standing at credit in the Fund upon trust for such person as shall have been nominated or appointed by such susbcriber as the subject for such trust. Every subscriber must forthwith nominate or appoint a person as the subject for such trust upon the condition that the said trust shall lapse and cease absolutely in the event of the death of the *cestuiquetrust* during the lifetime of the subscriber and thereupon such subscriber shall forthwith nominate and appoint as the subject of such trust another person in place of the *cestuiquetrust* so dying as aforesaid. In the event of any person nominated as *cestuiquetrust* being a minor or under disability to grant a legal receipt of discharge to the Company the subscriber must at the time of every nomination of a *cestuiquetrust* appoint a person of full age and capable of giving a legal receipt and discharge to whom the amount standing at the subscriber's credit is to be paid when occasion shall arise in trust for and on behalf of the nominee or *cestuiquetrust* aforesaid PROVIDED that if at the date of the death of any subscriber the *cestuiquetrust* shall have attained full age and be competent to give a legal receipt and discharge to the Company the appointment of such other person as aforesaid to receive the said amount on his or her behalf shall be deemed to be cancelled.

16. In the event of any subscriber failing to nominate a *cestuiquetrust* (and where required a person to receive on behalf of the said *cestuiquestrust* if a minor or under disability as aforesaid) the amount to the credit of such subscriber shall at his death lapse absolutely to the Company provided that it shall be in the discretion of the Company to grant the whole or any part of the amount which may have so lapsed to the executors or administrators of such deceased subscriber or to any relative or dependent of the deceased subscriber whose circumstances appear to the Company to warrant the concession.

17. Payment shall be made within 3 months from the date of retirement or death of the subscriber and shall include interest up to the date on which payment is made ; and if payment is not claimed before the expiration of the 3 months, no interest shall accrue beyond that period.

18. The Company shall have power to recover any money claims it may have against subscribers from the amount standing to their credit in the books of the Company.

19. All lapses and forfeitures occurring at any time shall be carried over by the Company to a separate account called "The Lapse and Forfeiture Account" and shall be used and applied by the Company in such manner and in such a way from time to time for the benefit of all or any of the employees of the Company as it shall at absolute discretion think fit.

20. Subject to the foregoing rules this said PENSION AND PROVIDENT FUND shall in all respects be deemed and taken to be the absolute property of the Company and to be disposable by the Company in any way the Company shall determine without protest or objection of any kind on the part of any subscriber or of any person or persons seeking to claim by, through, under, or in trust from him.

21. No subscriber shall be at liberty to assign, transfer or make over to any person whomsoever any such share or interest conditional or otherwise as may be accorded to such subscriber in the said Fund by the Company; no such share or interest (if any) shall be attachable by any creditor of any subscriber but the same (if any) shall be forfeited to the Company before any attachment be issued and shall also be forfeited to the Company upon and before insolvency of any subscriber.

22. List of persons of the mill and office establishment of the Century Spinning and Manufacturing Company, Limited, who have joined the Fund, is as follows :—

Nos.	Names.	Year of joining the Fund.	Amount standing to credit up to last account with interest as-		Amount credited this year and interest by		Total Amount.
			His contribution.	Company's contribution.	Him.	Company.	

THE CENTRAL INDIA SPINNING, WEAVING AND MANUFACTURING COMPANY, LIMITED.

Provident Fund.

RULES AND REGULATIONS.

I. The Fund shall be managed by the Manager of the Company, or such other person as the Board may from time to time appoint, and the decision of the Manager, or such other person as aforesaid, shall in all respects be binding upon the members entitled to participate in the Fund.

II. The Fund and all accumulations thereof may be employed for the purposes of the Company in the same manner as any other moneys belonging to them.

III. For more convenient administration, the Manager, or such other person appointed as aforesaid, may appoint a Committee of such number of Officers of the Company, as he shall think fit from time to time, to assist him in managing the Fund and they shall act under his instructions.

IV. The benefit of the Fund shall be open to all persons in the service of the Company, on and after lst July 1901, who are in receipt of a monthly pay of Rs. 10 and upwards, but it is not compulsory for any person to join the Fund.

V. From and after the lst day of July 1901, the following sums shall be deducted and withheld from the salary of each member and deposited in the Fund on behalf of the said member.

(*a*) From each rupee of the salary of each member half an anna or one anna at the option of the member contributing to the Fund, throughout his service, but no fraction of a rupee of his salary shall be taken into account for this purpose.

(*b*) These deductions shall be made monthly from the salaries including overtime, but excluding bonus or other extra allowance, and interest will be calculated every month at six per cent. per annum on the contribution of each contributing member and added to his deposit account at the end of each year.

(*c*) The subscriptions of any member absent on leave, shall, during the period of such absence, be assessed on the amount of pay to which he may be entitled during the said period.

VI. The Company may at their discretion from time to time contribute to the Fund a sum which wholly, or whose interest alone, shall, as the Company may stipulate, be distributed among the members, in proportion to the amount standing to their credit at the end of June each year ; but such distribution shall not exceed the amount subscribed by the member during that year. If there is any residue of the amount of the contribution by the Company, after deducting the above charge, the same shall be added to the Capital Fund. Provided that the Capital Fund shall, unless otherwise provided by the Company from time to time, belong to and be at the disposal of the Company, and the interest thereof alone shall be employed in adding to the contributions of the members in the way abovementioned.

VII. Any sum accruing to a depositor under Rule VI. shall be added provisionally [see Sections VIII., IX. (*a*) and (*b*)] to his deposit, with effect from 1st July every year.

VIII. All such sums and all interest accrued thereon shall be shewn in separate columns in his account and shall be subject to the conditions prescribed in Rule IX.

IX. When a member of the Fund leaves the service of the Company he shall be entitled to the amount standing to his credit, subject to the following proviso :—

(*a*) When a member leaves the service of the Company, or is discharged for ordinary misconduct or negligence, within a period of (10) years after joining the service, he will be liable to forfeit the whole of the amount accruing to him by way of his share of the Company's contributions or of interest thereon as per Rule VI.

(*b*) A member dismissed from the service for gross misconduct or fraud will receive only the balance to his credit, without the amount and interest accruing to him from the Company's contributions, and less any amount claimable by the Company on account of damages or loss occurring to them by his misconduct.

X. Should any amounts be forfeited under clauses (*a*) and (*b*) of the above rule (*i.e.*, IX.) they will be credited to the above Capital Fund.

XI. If a member dies in the service of the Company, the Manager, or such other person appointed as aforesaid, may at his discretion either pay the amount standing to his credit to his executors, or administrators, or to his widow, or to such other representative as the Manager, or such other person appointed as aforesaid, shall think fit, on behalf of the heir or heirs of the deceased. Any such payment shall be a discharge to the Fund and to the Company from such member's share and interest in the Fund.

XII. Advances from the amount standing to his credit may be granted to a member in deserving cases of sickness or other urgent cause, such advances to be subsequently repaid by the member, if he so wishes, by instalments to be fixed by the Manager or such other person appointed as aforesaid, in each case.

XIII. Members receiving such advances shall forego all interest and other benefits in respect of the amount so outstanding.

XIV. Nothing herein contained and nothing in the constitution of the said Fund shall make any attachment, assignment of, or charge on the amount otherwise payable to any member, valid, and any such attachment, assignment or charge which would be otherwise valid shall *ipso facto* put an end to the share and interest of such member in the said Fund; but the Manager or such other person appointed as aforesaid, shall have power, at his own discretion, to compensate such member to the extent of the amount so forfeited or any less amount.

XV. The Company may from time to time revise the above rules, or make any new rules or rule, as occasion may require, as to the Company may seem fit and proper.

By order of the Board of Directors,

TATA & SONS,

Nagpur, 14th April 1903. Agents.

CENTRAL INDIA SPINNING, WEAVING & MANUFACTURING COMPANY, LIMITED.

THE EMPRESS MILLS,

NAGPUR.

1. The Directors of this Company have been pleased to open a Gratuitous Pension Fund for the benefit of work-people employed at the Empress Mills, Nagpur. They intend to add to it, from time to time, such sums as to them may appear fit.

2. The object of the Funds is to pay, at the discretion of the Directors, to those work-people, both male and female, who have completed 30 years' service, and are no longer able to work, a Pension equal to half the average monthly earnings, during the last two years of such service, but not more than a maximum Pension of Rs. 5 per month will, in any case, be paid.

3. From the same Fund it is intended to pay, at the discretion of the Directors, to those work-people, who have completed 25 years' service, an increase of an eighth of the average monthly earnings, for the last year of such service, but not more than the maximum of Rs. 1¼ per month in the shape of such increase will, in any case, be paid.

4. A printed Certificate, signed by the Manager, will be given to every person who shall have completed five years' service ; all such certificates should be retained by such person, and produced when claiming the benefit of the increase of pay or of the Pension as above provided.

5. It is to be distinctly understood that the Pension will only be granted to such work-people as are after 30 years' service proved, to the satisfaction of the Directors, to be incapable of working any longer at the Mill and worthy of support.

6. The increase of wages, on account of 25 years' service, will continue to be paid, even after the expiration of 30 years' service, so long as the person entitled to it remains in the service of the Company.

7. All leave of absence granted to the work-people, not exceeding in the aggregate six months in every five consecutive years, will be considered as part of service. All leave in excess of such six months in five years will not be reckoned as part of service. If a person leaves the service and rejoins it, the term of service for the purpose of the above provisions will count from the day he rejoins or last rejoined.

8. It must be understood that the creation of the Fund in question . . . for any legal right upon any employé of the Company to participate in the benefit thereof, and that the Directors may, at their sole discretion, at any time withdraw the said Fund, or reduce it, or appropriate it otherwise than here provided.

9. The Directors also reserve absolute authority from time to time and at all times to add to and alter the conditions on which the employés of the Company shall have the benefit of the said Fund.

JAMSETJEE N. TATA,
Managing Director.

Appendix L.

Housing of Mill-hands.

No. 2738.

BOMBAY IMPROVEMENT TRUST,
BOMBAY, *23rd May* 1903.

To

THE SECRETARY,
MILLOWNERS' ASSOCIATION,
BOMBAY.

SIR,

With reference to correspondence ending with my No. 1546, dated 15th June 1901, I am directed to address you as follows in regard to the provision of quarters for mill operatives.

2. It will be remembered that the Trustees expressed their willingness to coöperate with your Association in terms which were detailed in my No. 1380, dated 28th May 1901, provided that it could be shown that quarters of the dimensions you wished could be constructed within the limits of cost laid down by you. In working out the Plans and Estimates it was found that it was impossible to keep within your limits owing to the heavy incidence of the cost of accessories such as passages, verandahs, drainage, water-supply and latrine accommodation.

3. To keep the cost of these quarters as low as possible, consistently with sanitary requirements, it will be necessary to reduce the size of the rooms, though under the proposals I will explain there will not be material diminution below your limits of size in the accommodation to be provided for each quarter. You desired rooms 12′ × 10′ × 10′ at a cost of Rs. 350 inclusive of latrines and connections when necessary.

The Trustees attach great importance to having the lines of rooms separated by a passage, so that the rooms may not be "back to back" ones in which proper ventilation is impossible. They also consider that a small verandah in front of each room will add greatly to the health and comfort of the residents. The provision of the passages and verandahs referred to would add about 60 per cent. to the floor areas, to be included in your limits of cost, per room. By partitioning off the verandah so as to allot a length of it to each room it is possible to locate a nahani and a cooking place in such length, thus leaving the room proper to be used solely for living purposes, and it is considered that with such an arrangement the size of the room itself can be reduced proportionately without lessening the convenience of residents.

Such an arrangement would have the advantages of reduced cost and the location of the bathing and cooking places outside the rooms themselves. The plans, as prepared, provide for units of accommodation of two sizes, plans of which are forwarded herewith. In one case the rooms are 10′×8′ with verandahs 4½ feet wide to contain the nahani and cooking place. The floor area of the unit is 116 square feet and the probable cost Rs. 384 per unit. In the other case the rooms are designed 12′×9′ with verandahs, also 4½ feet wide, to contain same conveniences as in the smaller units. The floor area per unit will be 148·5 square feet and the probable cost Rs. 464.

In most cases the heights of the rooms will be greater than that for which you have stipulated and will vary from 12 feet for the ground floor rooms of the smaller units to 10 feet on the top floors. The costs stated include provision for a central passage, latrine accommodation and water supply rooms on each floor, the latrine being in a detached stack separated 12 feet from the living rooms, arrangements for dealing storm water and sullage, separate storage reservoirs for the drinking water supply and that for use in flushing latrines and pumping plant to ensure a suitable supply of water for the above purposes on all floors when the Municipal mains fail to deliver by gravitation.

4. To enable the Association to see whether quarters at the costs stated are within the financial ability of Mills, I am to add the following regarding the probable returns and the redemption of the buildings by means of a sinking fund :—

(*a*) Units of 116 sq. feet, cost ...	Rs.	384	0	0				
Rent from tenants assumed...	„	2	8	0	per month.			
Rent to be paid to the Board								
4 per cent. on Rs. 384 ...	„	15	3	6	per annum.			
Receipts, Gross	„	2	8	0	per month	= Rs.	30	per annum.
Outgoings, say 33⅓ per cent.						= „	10	„ „
Net Receipts						Rs.	20	per annum.

Balance available for payment of Sinking Fund Rs. 4·64 per annum, which would redeem the cost of the building in 37 years at 4 per cent. Experience has shown that the deduction of 33⅓ per cent. is ample to meet all outgoings which include allowances for vacancies, bad debts, collection charges, Municipal rates and taxes, fire insurance and repairs.

(*b*) Units of 148·5 sq. feet, cost	Rs.	464	0	0				
Rent from tenants assumed at	„	2	12	0	per month.			
Rent to be paid to the Board								
4 per cent. on Rs. 464 ...	„	18·56			per annum.			
Receipts, Gross	„	2	12	0	per month	= Rs.	33	per annum.
Outgoings 33¾ per cent.						= „	11	„
Net Receipts ... Rs. 22 per annum.								

Balance available for payment of Sinking Fund Rs. 3·44 per annum, which would redeem the cost of the building in 47 years on a 4 per cent. basis.

It is for the Association to satisfy itself with the accuracy of this forecast of the financial results. If it is borne out the mill undertaking the provision of quarters on the terms arranged will become the possessor of the building in the period of years stated without having laid out any capital. If the operatives are capable of paying higher rents the redemption of the premises would be arranged in a shorter term.

5. If any mill desires to arrange its own form of accommodation I am to state that the Trustees will be glad to consider such proposals, which must, of course, be subject to the Board's approval.

6. With the details which I have now furnished the Association should be in a position to determine whether the accommodation described is likely to serve the purposes of mills as well as that asked for by you. If it is considered suitable I am to state that the Trustees would like to have definite proposals for the provision of quarters for one or more mills so that the experiment may be put in hand as early as possible. I am to observe that the figures dealt with in this letter refer to the cost of construction alone and contemplate the building of quarters on sites already in the possession of mills.

I have, &c.,
W. N. SHILSTONE,
Secretary.

No. 3295.

BOMBAY IMPROVEMENT TRUST,
BOMBAY, *23rd June* 1903.

To

THE SECRETARY,
MILLOWNERS' ASSOCIATION.

SIR,

Chawls for Mill-hands.

I am directed to invite your attention to my letter No. 2738 of the 23rd ultimo and to say that the submission of your definite proposals in the matter herein is awaited.

I have, &c.,
NOEL ROSS,
for Secretary.

MILLOWNERS' ASSOCIATION,
BOMBAY, *23rd June* 1903.

THE SECRETARY,
BOMBAY IMPROVEMENT TRUST.

SIR,

Chawls for Mill-hands.

In acknowledging the receipt of your letter No. 3295 of this date, I am directed to say that the above question is now before a Sub-Committee of this Association and that as soon as the members thereof have formulated their views, the General Committee will address you in detail on the subject.

I have, &c.,
FREDERICK NOEL-PATON,
Secretary.

MILLOWNERS' ASSOCIATION,
BOMBAY, 11*th July* 1903.

THE SECRETARY,
BOMBAY IMPROVEMENT TRUST,
BOMBAY.

SIR,

I am directed by the Committee of the Bombay Millowners' Association to acknowledge the receipt of your letter No. 2738, dated 23rd May, together with plans showing the structure of the quarters to be erected for mill operatives by a joint arrangement between the Trust and the Members of this Association. The Committee have had the advantage of considering along with your estimates of costs and returns certain notes by Mr. Sassoon J. David, the representative of the Association on your Board; and it is with satisfaction that they find so considerable a reduction to have been effected in the estimates which had formed the subject of those notes. The figures given—as, for instance, the estimates of rentals Rs. 2/8 and Rs. 2/12 per mensem for rooms of the dimensions figured—appear to my Committee to be difficult of attainment, seeing that Rs. 2 has always appeared to the Committee to be about as much as could be regularly counted on. But they do not wish it to be said that negotiations which have already occupied so long a time and whose importance they fully recognise had failed through captiousness on their part. They are given to understand that the Trust has given much attention to these statements and since it clearly appears from the statement furnished by you that no rental less than Rs. 2/8 in the one case and Rs. 2/12 in the other will fully provide for interest, outgoings and sinking fund at the rates agreed upon, the Committee consider that millowners may reasonably be expected to accept this risk in conjunction with a scheme which in some respects should be to their advantage,

2. It further appears to the Committee that greater economy and simplicity of arrangement would be attained if, instead of paying to the Trust a composite sum made up of interest and sinking charges and further setting aside so much for outgoings, the millowner should pay the Trust a nett rental of Rs. 30 or Rs. 33, as the case might be, per room per annum, the Trust on its part undertaking all charges for upkeep, etc., as detailed in the 4th paragraph of your letter under reply. This arrangement would, of course, apply only to chawls built upon land found by the millowner. For reasons indicated in my letter of the 13th April 1901, my Committee believe the system will be practically confined to such cases.

3. To sum up—

(*a*) A millowner having decided how many tenants he could find among employees, and having found the land for the erection of chawls on the model shown in your plans, would ask the Improvement Trust to erect as many rooms as he expected to fill.

(*b*) The Trust would erect the rooms in accordance with the plans referred to and would thereafter, during a period of 37 years, bear all charges for repairs, rates, taxes, insurance and sinking fund.

(*c*) The millowner would pay to the Trust a rental of Rs. 30 or Rs. 33 per room per annum, according as the rooms were of the greater or less dimensions shown in your plans, and at the end of 37 years the chawl would become the property of the millowner.

4. In conclusion, I am to convey to your Board an expression of the satisfaction with which my Committee view the conclusion of an arrangement which may, if it is properly taken advantage of by millowners, do much to further the objects for which the Improvement Trust was constituted.

I have, &c.,

FREDERICK NOEL-PATON,

Secretary.

BOMBAY IMPROVEMENT TRUST,

BOMBAY, 14*th October* 1903.

To

THE SECRETARY TO THE MILLOWNERS' ASSOCIATION,

BOMBAY.

SIR,

With reference to correspondence ending with your letter, dated 11th July 1903, regarding the question of housing mill operatives, I am directed to inform you that it appears to the Trustees immaterial whether payment should be made at a percentage of the cost *plus* a Sinking Fund or by means of a rent calculated to produce the same results. The Trustees would prefer that a practical experiment should be made by a few mills whose representatives might formulate definite proposals on which a certain number of quarters might be constructed. In the course of these business arrangements endeavour would be made by the Board to remove all legal and other difficulties which may be found to arise and after a few experiments have been made the millowners as well as the Board would be in a position to determine how to extend similar operations.

2. The Trustees hope that the Millowners' Association will now be able to put them in communication with a few mills which desire to provide quarters for their operatives.

I have, &c.,

Your most obedient servant,

NOEL ROSS,

for Secretary.

Copy of Minute in reference to the Memorandum of the CHAIRMAN of the IMPROVEMENT TRUST on the subject of Chawls for Mill-hands.

As stated by the Hon'ble Mr. Ibrahim Rahimtoola the proposal is to build chawls on lands belonging to mills, as indicated in para. (*d*) of the letter, dated 13th April 1901, from the Secretary of the Millowners' Association.

The question of building on land belonging to the Trust ought, therefore, to be considered separately in connection with para. *(f)* of the same letter.

According to the revised estimate the cost per unit of 116 square feet is put down at Rs. 471·48, and per unit of 144 square feet, at Rs. 553·45. The latter figure need not be considered as the cost is altogether prohibitive, and my remarks will, therefore, apply to the lesser area of 116 square feet, which nearly corresponds with the size suggested by the Association in para. (*b*) of their Secretary's letter, *viz.*, rooms measuring 12′ × 10′ × 10′, while the 116 square feet arrangement provides, I believe, a 10′ × 10′ × 10′ room with nahanis and cooking places outside the room.

We have, therefore, to consider whether the millowners are likely to accept this enhanced estimate which means an increase of 35 per cent. on the original maximum of Rs. 350 per unit. I am very much afraid they are not likely to do so and for the following reasons:—

The textile industry is not at all in a flourishing condition and offers no inducement for an additional charge on the cost of production.

However, even if the millowners can get an adequate return for the enhanced outlay from their workmen, etc., for the time being, there can be no doubt that they will not be able to continue to do so for any length of time in view of the chawls which we are building, and will continue to build every year for the working classes on a much cheaper basis, that is, even for a lesser return than 4 per cent. on the amount invested exclusive of the cost of land, etc. How can the millowners retain their tenants under such conditions, and why will the mill-hands agree to pay them higher rents, when they can get all the accommodation they may require at very low rentals from the Trust?

Those who intend to accept financial accommodation from the Trust, must have their plans approved by the Trust, which practically amounts to increased cost per unit as compared with buildings constructed by means of private capital and according to Municipal Regulations only. They are thus placed at some disadvantage and will not therefore, as far as I can see, avail themselves of such facilities at the revised cost per unit.

The question might, therefore, be regarded by the Trustees as part and parcel of their scheme to provide sanitary dwellings for the working classes, especially as the Trust will, in course of time, provide accommodation for mill-hands amongst others in Trust Chawls and also because though the millowners will be glad to coöperate with the Trust in this connection they would not be prepared to pay for the privilege of doing so, as stated in their letter.

Viewing the matter in this light I would suggest that the Trust should give the millowners such facilities as will not carry with it a sure liability of loss owing to the low rents that will be charged by the Trust for its own chawls. This can be done

(*a*) by charging a lower rate of interest than 4 per cent. This will be only extending the operations of the Trust in connection with Sanitary Workmen's dwellings as regards its financial aspect;

(*b*) by building the chawls according to the Trust's estimate and charging 4 per cent. on a basis of Rs. 350 per unit;

(c) by charging millowners such interest on the outlay as will not exceed the return obtained by the Trust on buildings of the same class and similarly situated. The fluctuation in the rent may be adjusted annually by an increase or a decrease in the rate of interest charged as the case may be.

The Millowners will, of course, take the risk of vacant rooms and will provide for repairs, sinking fund, etc., etc., and at the same time they will be in a position to control overcrowding more efficiently than speculative builders or even the Trust itself.

Should none of these suggestions commend itself to the Trustees, the matter, together with the necessary designs and plans, may be referred to the Millowners' Association, as they may possibly hit upon some workable arragement to coöperate with us. If the Trust's estimate for buildings is based upon the providing of wooden and coba flooring it is possible that by utilising steel joists and cement concrete or Marsland's patent flooring, as per sketch attached, and building three or four floors, the cost might be reduced to some extent. I see that the B. B. & C. I. Ry. Co. are adopting such floorings for their workmen's quarters.

As regards millowners who intend building on land belonging to the Trust, I am of opinion that they should be charged only a nominal rent for the land and be placed on the same footing as millowners who build on their own land in all other respects.

SASSOON J. DAVID.

P. S.—Another suggestion occurs to me in this connection and it recommends itself as perhaps the most practicable, provided it is within the scope of the Act.

I think that as an experimental measure, the Trust, in extension of its operations for building model workmen's dwellings, might construct a few chawls on land belonging or adjacent to the Mills, just as they are doing in Nagpada and elsewhere. Such chawls are not at all likely to remain unoccupied, and the very class of people for whom we are most anxious to provide accommodation, will be housed in sanitary dwellings and under efficient control against overcrowding.

The details of such an arrangement can be satisfactorily settled on a basis to be mutually agreed upon by the Trust and Millowners.

By providing these chawls, I believe, it will be found that the Trust's chawls in other localities will fetch better returns as the mill-hands will be provided for, and thus a somewhat better class of tenants will have an opportunity to occupy the outside chawls. I also believe the Trust will sooner or later be able to lease the chawls *en bloc* to the millowners.

This plan will obviate the necessity for entering into any complicated arrangements, which some of the suggestions made in my previous remarks will entail.

SASSOON J. DAVID.

30*th March* 1903.

MILLOWNERS' ASSOCIATION,
BOMBAY, 10*th November* 1903.

Circular to Members.

With reference to the correspondence regarding the creation of quarters for mill-hands which will be found at pages 32 and 60 of the Annual Report of the Association for 1901, I am now directed by the Committee to circulate letters recently exchanged with the Bombay Improvement Trust for your most favourable consideration and to suggest that millowners who may be disposed to enter into such an arrangement with the Trust as is proposed should call and see the undersigned on the subject.

FREDERICK NOEL-PATON,
Secretary.

APPENDIX M.

Reduction in the rates of freight on Cotton from Bombay to China.

BOMBAY, 21*st May* 1903.

THE SECRETARY,
MILLOWNERS' ASSOCIATION,
BOMBAY.

DEAR SIR,

We beg to acknowledge the receipt of your letter of the 11th March again asking a reduction in the rate of freight to Hongkong.

This matter has received very careful consideration, and it has been resolved, in view of your urgent request, to reduce the gross rate on Yarn to that port from Rs. 14 to Rs. 12 by steamers leaving here on or after 1st proximo.

In doing so we would like it to be clearly understood that we still maintain that our contention that Japanese Spinners were not unduly favoured by the reduced rate on cotton is perfectly sound ; the motive which has influenced us in agreeing to the reduction is due entirely to a desire to aid the millowning industry, with which we have so long been associated, in the present depression, and we trust that this feeling will duly be appreciated.

This further reduction in an already very moderate rate means a very considerable sacrifice on the part of the Steamship Companies, and this is accentuated by the fact that the steamers which are provided for the trade do not throughout the year receive full cargoes and in fact at times are idle for a considerable period. We regret that we cannot see our way to making the reduction in the rate retrospective, and we feel assured that your Association will cordially recognise the generosity of the concession now given.

We are, Dear Sir,
Yours faithfully,
FRANK RITCHIE,
Superintendent, P. & O. S. N. Co.
* * * * * * * *
Agent, Austrian Lloyd's S. N. Co.
GIOR FERRERO,
Agent, Rubattino S. N. Co.
T. KUSUMOTO,
Manager, Nippon Yusen Kaisha.

MILLOWNERS' ASSOCIATION,
BOMBAY, 9*th June* 1903.

THE SUPERINTENDENT, P. & O. S. N. Co.,
THE AGENT, AUSTRIAN LLOYD'S S. N. Co.,
THE AGENT, RUBATTINO S. N. Co.,
THE MANAGER, NIPPON YUSEN KAISHA,
BOMBAY.

GENTLEMEN,

Under the instructions of the Committee of the Bombay Millowners' Association I beg to acknowledge the receipt of your letter of the 21st ultimo in which you intimate that it has been resolved to reduce the gross rate on Yarn to Hongkong from Rs. 14 to Rs. 12 by steamers leaving Bombay on and after 1st June. I am to convey to you the thanks of the Committee and of the Members of the Association generally for this concession.

The Committee note your remarks in the third para. of your letter, but they regret they cannot agree with the views entertained by you in connection with the question of favouring Japanese Spinners.

I am, etc.,
C. J. MICHAEL,
for Secretary.

Appendix N.

Municipal Licenses.

COAL STORAGE ON BUNDERS.

THE HINDOOSTAN SPINNING AND WEAVING MILLS CO., LD.

BOMBAY, 27*th October* 1903.

To

THE SECRETARY,

MILLOWNERS' ASSOCIATION,

BOMBAY.

SIR,

We beg to bring to the notice of your Association that the Municipal Commissioner has required the above Company to apply for license for storage of coal at the Bunder pending removal of the same to the Mills. We are sure that all the members of the Association are aware that in cases of purchase of coals alongside the steamer the coals must necessarily be landed on the Bunder before the same are removed to the Mills, and, in our opinion, the Municipal Act does not provide for any license in such case except the same are stacked up for trade purposes.

In the present case, during the beginning of monsoon, two or three steamers with our consignment of coals of different shipment happened to come up all at the same time owing to tempestuous sea and stormy weather, and the quantity being rather large on account of the same being imported for the consumption of four Mills working under the Agency of Thackersey Mooljee took some time before the whole quantity was removed to the Mills, and occupied a little bigger space than was usually the case. The License Superintendent and the Municipal Commissioner, therefore, are of opinion that license should be applied for.

Under these circumstances we hand you enclosed copies of correspondence passed between ourselves and the Municipal Commissioner and the License Superintendent on the subject, and request that the matter should be taken up by the Association with the Municipal Commissioner on the basis of principle, as otherwise the Commissioner may likewise compel other Millowners for license in future.

Yours faithfully,

THACKERSEY MOOLJEE & Co.,

Secretaries and Treasurers.

THE HINDOOSTAN SPINNING AND WEAVING MILLS CO., LD.

BOMBAY, 13*th July* 1903.

To

DR. K. B. SHROFF,

ACTING SUPERINTENDENT OF LICENSES,

BOMBAY.

SIR,

We beg to acknowledge the receipt of your notice No. 950 of 1903-04 served on us on the 10th instant, requiring us to take license for storing coal at Frere Bunder, and beg to inform you, in reply to the same, that the coals have not been stacked up at Frere Bunder for any trade purposes, but were stored there for the time being for removing them to our Mills. You are well aware that the coal must be landed from lighters before removal to the Mills, and therefore we think that we are not liable for any license under the Municipal Act. We shall, therefore, feel obliged if you will kindly cancel the said notice.

We have the honour to be,

Sir,

Your most obedient servants,

S. H. KUDVA,

for Secretaries and Treasurers.

MUNICIPALITY OF BOMBAY.
No. 4856 OF 1903-04.

BOMBAY, 15*th July* 1903.

FROM
THE SUPERINTENDENT OF LICENSES,

To
THE SECRETARIES AND TREASURERS,
THE HINDOOSTAN SPINNING AND WEAVING MILLS CO., LD.

GENTLEMEN,

With reference to your letter dated the 13th instant, I have the honour to inform you that as the coal is stored outside the Mill premises you are clearly liable to pay the fee. If the storage had been within the Mill compound no license is necessary. I have, therefore, to request the favour of your paying in the fee as early as possible. The notice is returned herewith.

I have the honour to be,
Gentlemen,
Your most obedient servant,
K. B. SHROFF,
Acting Superintendent of Licenses.

THE HINDOOSTAN SPINNING AND WEAVING MILLS CO., LD.

BOMBAY, 24*th July* 1903.

To
THE SUPERINTENDENT OF LICENSES,
BOMBAY MUNICIPALITY.

SIR,

In reply to your letter No. 4856 of 1903-04, dated the 15th instant, which came to hand on the 22nd idem, we have the honour to draw your attention that the Municipal Act does not enjoin for a license to be taken except for the purposes of trade. In our case the stacking up of the coal on the Bunder was not done for the purposes of any trade, but was done preliminary to removal of the same to our Mills. It is quite impossible that the coals can be loaded in carts directly from lighters and removed to Mills before landing on Bunders.

Under the circumstances we again return the notice No. 950 of 1903-04 of 7th instant for favour of reconsideration of the matter and cancelling the same.

We have the honour to be,
Sir,
Your most obedient servants,
THACKERSEY MOOLJEE & CO.,
Secretaries and Treasurers.

No. 6245.

MUNICIPALITY OF BOMBAY, LICENSING DEPARTMENT.

BOMBAY, 4*th August* 1903.

FROM
THE SUPERINTENDENT OF LICENSES,

To
MESSRS. THACKERSEY MOOLJEE & Co.

GENTLEMEN,

With reference to your letter dated the 24th ultimo, I have the honour to state that the coal is stored not on the wharf but on Port Trust land where it is found from time to time throughout the whole year. Under these circumstances you are clearly liable to take out a license.

I have the honour to be,
Gentlemen,
Your most obedient servant,
K. B. SHROFF,
Acting Superintendent of Licenses.

THE HINDOOSTAN SPINNING AND WEAVING MILLS COMPANY, LIMITED.

BOMBAY, 11*th August* 1903.

To

THE SUPERINTENDENT OF LICENSES,

BOMBAY.

SIR,

In reply to your letter No. 6245, dated the 4th instant, to hand this day we have the honour to point out to you that for the purposes of consumption in the four different Mills working under our Agency large quantity of coals are purchased by us during whole of the year, deliverable alongside the steamers at several intervals, and it is, therefore, natural that our coal was found several times on the Port Trust land where the same was never stacked up for trade purposes, but was temporarily landed for being removed to the different Mills. You will thus conceive the reason why and under what circumstances our coal was seen on the Bunder from time to time and therefore it does not imply that license should be applied for by us. Your notice, therefore, is herewith returned for cancellation.

As to your remarks that the coal was found on Port Trust land and not on wharf, it may be explained that the same was landed there for convenience sake only and not for trade purposes.

Yours faithfully,

THACKERSEY MOOLJEE & Co.,

Secretaries and Treasurers.

No. 6523 OF 1903-04.

MUNICIPALITY OF BOMBAY, LICENSING DEPARTMENT,

BOMBAY, 13*th August* 1903.

FROM

THE SUPERINTENDENT OF LICENSES,

To

MESSRS. THACKERSEY MOOLJEE & Co.

GENTLEMEN,

With reference to your letter dated the 11th instant, I have the honour to state that this is a clear case of storage of coal and a license is necessary.

If, however, you are not satisfied with my decision you may appeal to the Municipal Commissioner or let the question be decided by one of the Presidency Magistrates in a Court of Law whether or not it is a storage within the meaning of Section 394 of the Municipal Act of 1888. Notice No. 950 is returned herewith.

I have the honour to be,

Gentlemen,

Your most obedient servant,

K. B. SHROFF,

Acting Superintendent of Licenses.

MUNICIPALITY OF BOMBAY.

BOMBAY, 9*th September* 1903.

FROM

THE SUPERINTENDENT OF LICENSES,

To

MESSRS. THACKERSEY MOOLJEE & Co.,

SECRETARIES AND TREASURERS OF THE HINDOOSTAN SPG. AND WG. MILLS. Co., LD.

GENTLEMEN,

I have the honour to invite your attention to this office No. 6523 of 13th ultimo and to request the favour of your early compliance thereto.

I have the honour to be,

Gentlemen,

Your most obedient servant,

K. B. SHROFF,

Acting Superintendent of Licenses.

THE HINDOOSTAN SPINNING AND WEAVING MILLS CO., LD.

BOMBAY, 11*th September* 1903.

To

THE SUPERINTENDENT OF LICENSES,
MUNICIPALITY OF BOMBAY.

SIR,

We have the honour to acknowledge the receipt of your letter dated 9th instant. In reply thereto we beg to say that we are still carrying on a correspondence with regard to the matter referred to in your letter with the Municipal Commissioner for the City of Bombay. We shall, therefore, thank you to wait till the matter is finally settled by the Commissioner.

We have the honour to be,
Sir,
Your most obedient servants,
THACKERSEY MOOLJEE & Co.,
Secretaries and Treasurers.

No. 9199 OF 1903-04.

MUNICIPALITY OF BOMBAY, BOMBAY, 7*th October* 1903.

FROM

THE SUPERINTENDENT OF LICENSES,

To

MESSRS. THACKERSEY MOOLJEE & Co.

GENTLEMEN,

With reference to your letter dated the 11th ultimo, I have the honour to request the favour of your paying in the license fee for coal, as the matter has been finally decided by the Municipal Commissioner against you.

I have the honour to be,
Gentlemen,
Your most obedient servant,
K. B. SHROFF,
Acting Superintendent of Licenses.

THE HINDOOSTAN SPINNING AND WEAVING MILLS COMPANY, LD.

BOMBAY, 20*th August* 1903.

To

THE MUNICIPAL COMMISSIONER FOR THE CITY OF BOMBAY,
BOMBAY.

SIR,

We have the honor to inform you that the Superintendent of Licenses by a notice on us bearing No. 950, dated 7th July last, required us to apply for a license for coals then lying on the Port Trust land and on the bunder for transit to the mill premises. We, in response to the same, protested against this request on the part of the Superintendent, pointing him out that landing of the coal from lighters for removal to the mills can in no way be considered as the storage of coal on the bunder or on the Port Trust land ; besides, we were not dealers in coal, and hence under the Act we were not liable for any license of the sort as required by the Superintendent.

The Superintendent not being satisfied with the explanation offered, still maintains his former opinion and presses for us to either apply for license or to appeal to the Municipal Commissioner or to allow our case to be settled by a magistrate, and hence this appeal to you, before we rush to the Court, and hope that weighing all the circumstances and facts you will be of opinion that the notice of the Superintendent under reference should be cancelled, and accordingly instruct that officer.

It is obvious that the coal must be landed from the lighters for the purpose of removing the same to the mills. It may be observed that there are four mills working under different names of our own agency, and all the coals required for the consumption of these mills are brought alongside the steamers for different shipments and are usually passed under the name of Thackersey Mooljee & Co. It is quite natural that the Superintendent of Licenses, assuming us to be dealers in coal from the reason of his noticing our coals landing on bunder every month and in large quantity for the consumption of our mills should insist us for having a license. But we submit that neither ourselves nor our companies are coal traders, all the coals noticed on the Bunders and/or on the Port Trust land are simply landed there for transit to the mills premises. Only during the beginning of the current monsoon when sea was very stormy and boisterous one or two shipments of our consignments happened to arrive at one and the same time, and therefore an unusually large quantity of coal was landed, and it happened that there being many steamers discharging coal there, the wharf was full of coal and consequently for the convenience of removal a portion of our coal was landed on the Port Trust land.

Under these circumstances we hope you will decide that we are not liable for any license and order the Superintendent of Licenses to cancel the notice in question herein enclosed.

We have the honor to be,
Sir,
Your most obedient servants,
THACKERSEY MOOLJEE & Co.,
Secretaries and Treasurers.

No. 15553 OF 1903-04.

FROM

W. L. HARVEY, ESQ., C.I.E., I.C.S.,
MUNICIPAL COMMISSIONER FOR THE CITY OF BOMBAY.

To

MESSRS. THACKERSEY MOOLJEE & Co.

MUNICIPAL COMMISSIONER'S OFFICE,
BOMBAY, *8th September* 1903.

GENTLEMEN,

With reference to your letter of the 20th ultimo, I have the honour to inform you that the Superintendent of Licenses reports that coal belonging to you is found stacked on the Port Trust land at Reay Road throughout the year, and under Section 394 (1) of the Municipal Act you are liable to take out a license for using the premises for the purpose.

The exemption claimed by you could only be granted if the coal were stacked at the mill premises, in which case Sub-Section 3 of Section 394 is applicable.

Under the circumstances I request the favour of your paying the necessary license fee.

The accompaniment to your letter is herewith returned.

I have the honor to be,
Gentlemen,
Yuor most obedient servant,
W. L. HARVEY,
Munl. Commissioner for the City of Bombay.

THE HINDOOSTAN SPINNING AND WEAVING MILLS COMPANY, LD.,

BOMBAY, 12*th September* 1903.

To

THE MUNICIPAL COMMISSIONER FOR THE CITY OF BOMBAY.

SIR,

We beg to acknowledge receipt of your letter dated 8th instant. In reply to the same we beg to point out to you that the report of the Superintendent of Licenses is exaggerated. We have in the course of the year to import between 20,000 to 25,000 tons of coal for our mills. It is only when the steamers come in succession the coal is stacked in the Port Trust land. But such cases rarely occur. Whenever such a case takes place, we use our utmost endeavours to carry away the coal to our respective mills with great promptness. At present there is no coal lying on the bunder on our account.

Under these circumstances you will see that we are not at all bound to take out the licenses. It is not for the trivial sum of Rs. 25 that we raise our objection, but it is the principle for which we contend.

We have the honor to be,
Sir,
Your most obedient servants,
THACKERSEY MOOLJEE & Co.,
Secretaries and Treasurers.

P.S.—We may draw your attention to the fact that it would never pay a Millowner to stack coal at bunder where in addition to the rent payable to the Port Trust there is a risk of shortage. Mills have large compounds where coal may be stored with perfect safety.

No. 18419 OF 1903-04.

FROM

W. L. HARVEY, ESQ., C.I.E., I.C.S.,

MUNICIPAL COMMISSIONER FOR THE CITY OF BOMBAY,

To

MESSRS. THACKERSEY MOOLJEE & Co.

MUNICIPAL COMMISSIONER'S OFFICE,
BOMBAY, 30*th September* 1903.

GENTLEMEN,

With reference to your letter of the 12th instant, I have the honour to inform you that a person using premises other than mill premises for any of the purposes mentioned in Section 394 (1) is under that section bound to obtain a license. The period during which the coal is stacked at the bunder does not affect the question. It has, however, been ascertained from the Port Trust Register that you occupied 50,000 square yards of their ground from 1st April to 31st July for the storage of coal.

Under the circumstances I trust you will see your way to pay the necessary license fee.

I have the honor to be,
Gentlemen,
Your most obedient servant,
W. L. HARVEY,
Muni. Commissioner for the City of Bombay.

MUNICIPALITY OF BOMBAY.

No. 9911 OF 1903-04.

FROM

THE SUPERINTENDENT OF LICENSES,

To

MESSRS. THACKERSEY MOOLJEE & Co.

BOMBAY, 26*th October* 1903.

GENTLEMEN,

I have the honour to invite your attention to this Office No. 9199, dated 7th instant, and to request the favour of an early reply thereto.

It is presumed, since you have failed to pay the license fee in question that you like the matter referred to to be finally decided in a Court of Law.

I have the honor to be,
Gentlemen,
Your most obedient servant,
K. B. SHROFF,
Acting Superintendent of Licenses.

MILLOWNERS' ASSOCIATION,

BOMBAY, 7*th November* 1903.

THE SECRETARIES,
THE HINDUSTAN S. & W. MILLS CO., LTD.

DEAR SIRS,

I am directed by the Committee of the Millowners' Association to acknowledge the receipt of your letter, with accompaniments, relating to a certain dispute between your Company and the Municipal Commissioner as to the levy of a license fee for the storage of coal on Port Trust land. The matter has been carefully considered by the Committee, who are of opinion that no good purpose would be served by their intervention at the present time.

I am, Dear Sirs,
Yours faithfully,
FREDERICK NOEL-PATON,
Secretary.

BOMBAY, 23*rd February* 1903.

To

THE SECRETARY,
MILLOWNERS' ASSOCIATION,
BOMBAY.

DEAR SIR,

We shall feel obliged if you will let us know if coal stored on the Bunder for the use of Mills is liable to any license fee leviable by the Municipality. We have understood it to apply to trade purposes only, and yet the Municipality persist in demanding the same from us.

Yours faithfully,
VISRAM IBRAHIM & Co.,
Agents, Star of India Mills, Ld.

MILLOWNERS' ASSOCIATION,
BOMBAY, 26*th February* 1903.

MESSRS. VISRAM EBRAHIM & Co.,
AGENTS, THE STAR OF INDIA MILLS, LD.

DEAR SIRS,

In reply to your letter of yesterday's date I am directed to say that the Association has no information as to any charge directly leviable by the Municipality upon coal; but that, under Section 394 (*1*) (*d*), a person using, for the storage of coal, any *premises other than* (*Sub-section 3*) "*mills* for spinning or weaving cotton, wool, silk or jute," must pay a license for such use of the premises. You will see that the section says nothing of the storage of coal "for the use of" mills.

I am, dear Sirs,
Yours faithfully,
FREDERICK NOEL-PATON,
Secretary.

THE WALLACE FLOUR MILL COMPANY,
BOMBAY, 11*th March* 1902.

THE SECRETARY,
MILLOWNERS' ASSOCIATION,
BOMBAY.

DEAR SIR,

Some time ago we had some correspondence with you regarding the action of the Municipality in insisting upon us for the issue of a license for the storage of oil at our mill in face of the Magistrate's decision last year to the contrary. As we have already told you, the matter culminated in their issuing a fresh summons this year, which was returnable on the 5th instant. However, when the case came on for hearing on the day it was found that the Municipality had withdrawn from the prosecution. The matter has ended here. We have not taken out the oil license nor are going to take it.

As regards the coal license we have taken it this year, as we had been doing it for the last two years.

We take this opportunity to thank the Committee for the kind interest they have taken in this question.

Yours faithfully,
VISANJI SONS & Co.,
Proprietors, The Wallace Flour Mill Co.

Appendix O.

Cotton Duties Act, II. of 1896.

(*Excise Duties on Cloth and the Returns of Production.*)

THE MUIR MILLS COMPANY, LD.,
CAWNPORE, 24*th February* 1903.

THE SECRETARY,
MILLOWNERS' ASSOCIATION,
BOMBAY.

DEAR SIR,

You have probably seen correspondence in the papers regarding an agitation I have been endeavouring to promote for the removal of the Excise Duties on cotton cloths.

In the first instance I addressed a letter (copy enclosed) to all weaving mills in India, my object being to ascertain what the views of all those immediately concerned in the question actually were.

I attach a list of all the mills addressed, and have noted against each those from whom replies have been received. All without exception are in favour of steps being taken for removal of the duties, and a large number think your Association would be the best to move in the matter, a suggestion which I cordially endorse.

I will be in England myself this summer and would be glad to help in every possible way, but having been present and heard the Viceroy's views at the Bengal Chamber of Commerce dinner I think we should, in the first instance, approach him and then redress failing we should set about petitioning Parliament.

You are probably aware that under the garb of the Cotton Duties Act the Custom House is levying duties on the following industries, *viz.* :—

Bleaching and Finishing.
Dyeing.
Printing.

Yours faithfully,
S. M. JOHNSON,
Managing Director.

THE MUIR MILLS COMPANY, LD.,
CAWNPORE,_____1903.

Copy of letter sent to all Weaving Mills in India.

DEAR SIRS,

When I was in Lancashire last year and the subject of Excise Duties on cotton cloths in India came from time to time under discussion I was much impressed with the spontaneousness with which the duties were condemned, especially when it was alleged that Lancashire was in no way benefited by their imposition, a fact which did not appear to be generally known.

It was more than once suggested to me that Indian cotton weaving mills should set on foot an agitation for the repeal of these duties not in India but in England.

I think that here in India we have done all that it is possible to do, so that redress here is hopeless, and that we should therefore now strain every nerve to obtain redress in England.

For this purpose I suggest that a strong and representative deputation from Indian weaving mills be sent to England this summer : that its duties should be, first, to deliver addresses on the subject at the principal towns in Lancashire ; secondly, to interview the Secretary of State for India ; and, thirdly, to present a petition to Parliament praying for repeal of the duties.

At the time the duties were imposed there was much conflict of opinion as to their ultimate incidence. The opinion of Government was that they would fall upon the consumer, but I think experience has proved beyond all doubt that prices have been in no way affected and that the duties have been paid solely and entirely by the manufacturer.

This being the case, the duty is one which cripples a home industry and as such is quite indefensible. Neither does it serve its avowed purpose of placing the Indian Mill on an equality with its home and foreign rivals, because the bulk of the goods imported are not similar to those made here.

I invite your earnest consideration of the question and your support. I suggest that every Weaving Mill should send one representative and that his expense be borne by his Mill ; but if this is not practicable, then that the expenses of those who do go be divided in the proportion of loom power among all Weaving Mills. I am confident that if worked properly the repeal of this cruel impost is certain.

The petition to be laid before Parliament should be signed by the employés of all Mills as well as by the shareholders and proprietors, because these heavy duties so cripple the weaving industry that it is impossible to improve wages, and in consequence weavers readily abandon their looms and seek employment at any other work that promises even the slightest improvement in wages.

An early reply will oblige.

Yours faithfully,
(Sd.) S. M. JOHNSON,
Managing Director.

MILLOWNERS' ASSOCIATION,
BOMBAY, *9th March* 1903.

S. M. JOHNSON, ESQ.,
MANAGING DIRECTOR, THE MUIR MILLS CO., LD.,
CAWNPORE.

DEAR SIR,

I am directed by the Committee of the Bombay Millowners' Association to acknowledge the receipt of your letter of the 24th February on the subject of a proposed renewal of the agitation for removal of the Excise Duties on Cotton Cloth. I am to say that, in this as in many other matters affecting the interests of the Industry throughout India, the Association has from time to time made great efforts, in which they have not always felt that they received from the persons whose interests were affected the practical support they would have looked for. You will understand that the usefulness of such an Association is in some degree limited by the extent to which its membership includes every considerable Company engaged in the spinning and weaving of cotton, and even by the amount of funds at its disposal. The absence of the names of your Company and of some others from the list of Members has therefore been a subject of regret, and in the present instance places the Committee in some difficulty. They direct me to say that they share your opinion as to the desirability of employing every effort likely to procure the removal of the duties ; but they instruct me also to hand you a copy of a letter from the Government of Bombay, dated the 27th May 1901, conveying the reply to certain representations in this matter. You will see that the terms are such that no good result could well be expected from further effort in the same quarter. The Committee are, however, fully disposed to consider the expediency of an organised effort to be made in England ; and I am to say that to this end they would be glad if you could visit Bombay and meet the Committee with a view to consultation as to the prospects and the details of such an agitation.

I am, dear Sir,
Yours faithfully,
FREDERICK NOEL-PATON,
Secretary.

THE MUIR MILLS COMPANY, LD.,
CAWNPORE, *17th March* 1904.

THE SECRETARY,
THE MILLOWNERS' ASSOCIATION,
BOMBAY.

DEAR SIR,

I have the pleasure to acknowledge receipt of your letter of the 9th instant, together with its enclosure.

It appears to me that the Cotton Mill industry in India should recognize that the imposition of the cotton excise duties cannot be justly described as a tax imposed on local industries at the mandate of Lancashire.

Though at the outset the real object of the duties was obscured and there was indignation at a policy which appeared directed against one of our principal industries, it is clear now that

cotton import duties are part of the fiscal policy of the Indian Government. The import duties on cotton goods are in fact necessary for revenue purposes, and this being the case there *must* be excise duties, or otherwise the doctrine of free trade would be absolutely violated.

An exactly similar state of affairs prevails in Egypt—there there is duty on imported cotton goods and excise duties were forthwith levied on the local product.

The revenue from cotton excise duties in India is only about 12 lakhs of rupees a year—a very paltry sum in a Budget which deals with a revenue of about 75 million sterling, and it is hardly conceivable that any Government would for so small a consideration cripple an important industry. It is the principle of free trade that we have to contend with, and it appears to me, after very mature consideration, that the only avenue of relief is the abolition of import duties on cotton goods altogether.

The gross revenue from the cotton customs duties is about 90 lakhs of rupees a year, the net revenue probably does not exceed 80 lakhs, and the problem, therefore, is what is there to take the place of the cotton import duties.

I have for many years been of opinion that Government have at hand in the Railways—most of which are owned by itself—a resource for revenue purposes, which should not be neglected. The number of passengers who travelled by Railway in the year 1901 in all India and Burmah amounted to *181 millions*.

If a tax of one anna per passenger, irrespective of distance, were levied on each passenger travelling, the revenue to Government would be 113 lakhs of rupees, that is more than sufficient to make up for the cotton import duties. In practice, it would perhaps not be found desirable to place this tax on the lowest class of passengers travelling short distances; but however the scheme might be adapted to the exigencies of the travelling public, it is quite clear that a handsome revenue could be obtained from this source and that the tax would be one having much to recommend it: its incidence would not be felt, hardly realized, and its collection and payment could be effected with the utmost ease.

The British Government levy a tax, I believe, on the Railway passenger traffic in the United Kingdom: why should the Indian Government not do the same?

In regard to your suggestion that I should visit Bombay and meet the Committee of your Association, I need hardly say that I will be very pleased to do so. But I can only do it on my way to England, probably late in April or early in May.

Meanwhile I solicit that the Muir Mills be enrolled as a member of your Association.

Yours faithfully,
S. M. JOHNSON,
Managing Director.

MILLOWNERS' ASSOCIATION,
BOMBAY, *7th April* 1903.

THE MANAGING DIRECTOR,
THE MUIR MILLS COMPANY, LD.,
CAWNPORE.

DEAR SIR,

I am directed by the Committee of the Bombay Millowners' Association to thank you for your letter of the 17th March last, and to say that they will be glad to discuss the question of the Cotton Duties with you when you are in Bombay. I am to add, however, that they do not think that any useful purpose would be served by their advancing your proposal of a tax upon Railway passenger traffic. The Committee note with pleasure that you desire to be enrolled as members of this Association on behalf of the above Mills, and I beg to enclose a bill for subscription for the current year.

I am, dear Sir,
Yours faithfully,
FREDERICK NOEL-PATON,
Secretary.

THE MUIR MILLS COMPANY, LD.,
CAWNPORE, *9th April* 1903.

THE SECRETARY,
MILLOWNERS' ASSOCIATION,
BOMBAY.

DEAR SIR,

I am in receipt of your letter of the 7th instant and note contents.

Since writing to you I have received copies of Lancashire papers in which reports of the reception accorded my letter regarding the cotton excise duties appeared, and doubtless your Committee has also seen them. Perhaps the members would like to peruse my reply, and I therefore enclose copy.

I was of opinion at one time that it would be almost better to urge the abolition of the entire dues on cotton, and Lancashire would apparently join hands with us in such a course, but the reply given by Lord George Hamilton to Mr. Emmott's question on the subject removes any prospect of relief by this means. It therefore appears as if we must adhere to the original proposition, *viz.*, to urge the removal of the excise duties, and I would be glad to know what the Committee's views on the subject are. Perhaps it would be advisable to interview Lord Curzon first, and, failing him, to send a deputation to the Secretary of State; but if anything is to be done at all this summer, there is no time to be lost, and I would respectfully urge as early action as possible.

If a deputation from the Bombay Millowners' Association to the Viceroy could be arranged, the interview might come off at Simla before the end of this month.

The favour of early reply is requested.

Yours faithfully,
S. M. JOHNSON,
Managing Director.

THE MUIR MILLS COMPANY, LD.,
CAWNPORE, *2nd April* 1903.

DEAR SIR,

From copies of some of the Lancashire papers which have come to me by the last two English mails I find that a letter of mine addressed to the Cawnpore Cotton Mills was read at a recent meeting of the Blackburn Chamber of Commerce, and was denounced there with very considerable, and, as it appears to me, unnecessary vehemence and warmth.

I also gather from the proceedings at the meeting that it was Mr. John Harwood who made use of my letter in this fashion, and that he was authorized to send a "convincing" reply.

I would like to mention that my letter was not addressed to Mr. Harwood, but to the Cawnpore Cotton Mills, and that a reply was received by me from this Company as long ago as the 5th February.

In that letter the Cawnpore Cotton Mills say:—

> "The strongest argument in favour of the removal of the duties should lie in the removal of the idea that Lancashire manufacturers are benefited by the imposition of the tax. That object once attained the rest would be easy"

and go on to advise that an agitation be also set on foot with the Indian Government for the removal of the duties.

Why, therefore, Mr. Harwood should consider himself at liberty to make use of a letter not intended for him ; or why he should consider himself called upon to reply to such a letter, are questions to which I confess I cannot find satisfactory answers. If Mr. Harwood is still in the employ of the Cawnpore Cotton Mills his duty clearly lies in the direction of the removal of the duty ; if he is not in their employ and has axes of his own to grind, then he has made improper use of the correspondence ; for the interests of the shareholders and creditors of the Cawnpore Cotton Mills demand that the excise duties be removed.

Having disposed of this matter I would like to turn to my Lancashire friends and ask them what it is I, or we, have done to invoke their wrath?

We, that is the owners of power looms in India, are subjected to an excise duty, which we say for many reasons should be removed ; why should such a request make Lancashire so exceedingly angry?

We do not desire that by its removal any burden or grievance Lancashire may labour under should be made in the least degree more irksome to it, or that Lancashire Mills should not, if it pleases them so to do, agitate for the complete removal of their own burden. All we want is mitigation of our own sufferings, and why should Lancashire grudge that to us?

I am afraid the reply is to be found in an analysis of Great Britain's true policy in India: it is that in all things India must finally and always be subservient to England, and shape its policy not in furtherance of its own interests but to suit those of the conquering country.

This excise duty is not required for revenue purposes in India, the yield is only a paltry £80,000 a year. It is such a miserable expedient that the allied industry of hand loom-weaving cannot be subjected to the duty, and power looms in native territory are altogether exempt. Yet it is applied, and applied with a rigour, that cripples our power loom-weaving and threatens to stifle at the outset such new industries as Bleaching, Finishing, Dyeing, Calico Printing, for all of which there is ample scope in India, but which are now practically unknown outside two of our Presidency towns.

The reply of the Government of India to repeated representations is that so long as there are import duties on cotton goods there must be countervailing excise duties, and Mr. Whittaker's argument at Blackburn is that if there is import there must be countervailing duty —there must be equality between subjects of the same King.

If this profession were true, why are not the same principles observed in, for instance, the exports of wheat from India to Great Britain? The latter imports wheat from India to the extent of 4 million cwts. a year, and produces herself 52 million bushels (figures for 1901). The wheat from India is subjected to an import duty of 3 pence per cwt. Is there a countervailing duty on English home-grown wheat? Are English farmers made to understand that to preserve the fetish of free trade, to maintain equality between subjects of the same King, they must pay a countervailing duty ? No, they are exempt!

It may be argued that there is a difference between agricultural produce and manufactures. So there is, but the difference is all in favour of levying the duty on agricultural produce and not on manufactures. In the former case the duty must almost inevitably pass on to the consumer ; in the latter it may have to be borne by the manufacturer, and thus have a deterrent influence on industry. The English corn duty is imposed—one may take it mainly to protect the home industry—to save it from utter extinction.

Here, then, are two standing examples, *viz.*, the import duty on Indian wheat in Great Britain and the import duty on British cotton goods in India. In the one case there is a countervailing duty, but not in the other. The countervailing duty on cotton goods in India "robs" (according to Mr. Whittaker) "the import duties of their sting," but in the case of Indian wheat the sting has to remain. And it will always remain, unless and until India obtains

economic freedom. India has religious freedom and a free Press. The liberty of the subject and even-handed justice are greater than ever they were in the whole past history of India, but perhaps the greatest boon has yet to come, and that will be liberty to be governed by its own statesmen for its own good and not for parochial interests in Great Britain.

The text of our statesmen, our business men and of our capitalists is the development of India's industrial resources, but how is it possible? It is a fact that if any of the cloth woven in our mills is bleached it is immediately liable to a higher duty; if it is calendered, or dyed, or printed in each case it is subjected to a higher duty because of this further process; the income derived from these additional duties is absolutely insignificant; they are put on merely to preserve the fetish of free trade or, as some would say, to please Lancashire. And yet, in the face of these facts, Government desire the native capitalist to invest his money in developing industries! Well might it be said as has been said, in reply to my circular, "England cannot honourably interfere with Indian finance and insist on the very same measure of excise on Indian cloth which she refuses to accept for English wheat. This is a point on which not merely the British public but the Indian public (European and Native) should be aroused, and the Indian public should be not merely aroused but made articulate in resentment at the differential treatment of what Lord Curzon has called the jewel of the British Empire. Imperialism should be made to blush for its cynical disregard of its high professions of equality within the Empire.

I do not think I need take any notice of the charges of misstatement and inaccuracy that were so freely indulged in at the Blackburn meeting. Except in regard to the point as to the bulk of the goods made in India not being similar to those imported (in regard to which Lancashire and Indian Millowners differ) not one of the speakers at Blackburn had any personal knowledge of the accuracy or otherwise of the statements in my letter. Invective is not argument, and the threats to crush us and give us a warm reception only show what a hollow pretence the professions of interest in the prosperity of India really are.

But we will not be dismayed: there may be even in Blackburn people who, on a dispassionate statement of facts, would condemn the Indian Cotton Excise Duties, and hear with amazement, and perhaps shame, of the differential treatment that is accorded to India when its interests are not identical with those of any considerable section in Great Britain. And if we cannot expect sympathy from our Lancashire friends, we shall, at all events, hope for justice from the British public and its Parliament.

Yours faithfully,
S. M. JOHNSON.

MILLOWNERS' ASSOCIATION,
BOMBAY, *2nd May* 1903.

S. M. JOHNSON, ESQ.,
MANAGING DIRECTOR, THE MUIR MILLS CO., LD.,
CAWNPORE.

DEAR SIR,

I am directed by the Committee of the Bombay Millowners' Association to say that your letter of the 9th April dealing further with the question of repeal of the Cotton Duties Act has been considered by the Committee, but that in view of the explicit declaration of policy contained in the letter of Government of India, dated 27th May 1901 (of which a copy was enclosed in mine of the 9th March), they do not see that any good result could at the present time attend a proposal for the abolition of the Excise Duties.

Yours faithfully,
FREDERICK NOEL-PATON,
Secretary.

THE KRISHNA MILLS, LIMITED,
BEAWAR, *25th April* 1903.

To

THE SECRETARY,
MILLOWNERS' ASSOCIATION,
BOMBAY.

DEAR SIR,

We have received a copy of a circular letter from Mr. Johnson who intends to send the same to Lancashire for publication in newspapers. Along with the same Mr. Johnson informs us that the Excise Duty question recently raised again by him has been confided to your care and all correspondence regarding the same has been sent to you.

With regard to this Excise Duty agitation we have to request you that your body is the first and foremost amongst the carriers of Mill Industry, and especially Bombay being the Cotton Mills' centre, we have to request you to carry the agitation all through India and should thus allow us to see what fruit the agitation bears out. We will be allowed here to remark that the Bombay Millowners chiefly carry out export, and it is only the up-country Millowners who are the chief sufferers on account of the Excise Duty presently.

Bombay Millowners to a great extent make up what they have to pay in the form of Excise Duty by their large trade with foreign countries, but there is to come a day when they too shall be required to depend upon home consumption and thus have to fare the same lot with us. In our opinion, therefore, this Excise Duty question is a universal question so far as Indian Millowners are concerned, and therefore the question is of vital importance to your body also.

We have now to suggest you, just as we did to Mr. Johnson, that there should soon be called a Conference of all the Weaving Millowners of all over India either at Bombay or some such place of commercial importance. In our opinion, and as that of Mr. Johnson also, unless a deputation to England to fight against the Duty is sent it is impossible to be abolished and there cannot be any firm arrangements in this matter as regards expense and system of working out the problem unless a Conference of the Millowners be called. Bombay being the centre of India Cotton Mills is a suitable site for the Conference. Cawnpore also is not unsuitable, because it is the largest interior cloth market of India, and by visiting this market at the time of this Conference the Millowners of this country will also thoroughly be able to know what is required for consumption of cloth in their own country and whether in any way they could put their Mills in a state of supplying home demands.

Hoping you shall put this before the members of your Association and let us have your opinion on the point.

We remain, dear Sir,
Yours faithfully,
THAKURDAS KHINYRAJ & Co.,
Agents.

P.S.—We may think necessary to mention that this is the proper time to reach to the Government for repeal of cotton duties, as they have been always saying that they wish development of Indian industry while at the same time this cursed duty is pulling off the root of one of the principal industries of the country, and we have just proper opportunity to know from Lord Curzon whether these Duties are fulfilling the object of his wishes for Indian Arts and Industrial development for which he always shows his keen attention almost in every of his local speeches.

MILLOWNERS' ASSOCIATION,
BOMBAY, *27th April* 1903.

MESSRS. THAKURDAS KHINYRAJ & Co.,
SECRETARIES, TREASURERS & AGENTS,
THE KRISHNA MILLS, LIMITED,
BEAWAR.

DEAR SIRS,

I am directed by the Committee of the Bombay Millowners' Association to acknowledge the receipt of your letter of the 25th instant about the desired repeal of the Indian Cotton Duties Act. I am to say that the Committee do not understand how the question can be said to have been confided to "their care," seeing that they have since the passing of the Act continually used their best efforts to obtain its repeal, and will continue to do so should favourable circumstances arise. In these as in other efforts for the good of the industry throughout India the Committee have not always felt that they received from up-country mills the support that was indispensable to success. That success is necessarily dependent to some extent on the inclusion of all mills on its list of members and even on the amount of the funds derived from such membership. While appreciating your recognition of the power of the Association to advance the interests of the Industry, the Committee desire me to remark on the fact that your mill does not appear on the list of members, and to express the hope that you will see your way to joining. A copy of the rule regarding membership is attached.

Yours faithfully,
FREDERICK NOEL-PATON,
Secretary.

THE MUIR MILLS COMPANY, LIMITED,
CAWNPORE, *27th October* 1903.

THE SECRETARY,
MILLOWNERS' ASSOCIATION,
BOMBAY.

DEAR SIR,

I enclose copies of letters I have just circulated to all cotton mills and to the Press, and have to ask you kindly to place them before your Committee and enquire if they will convene a meeting of the representatives of all cotton mills in India, say early in December next, in Bombay to discuss the question of Excise Duty and outturn statements and pass resolutions, one of which I would suggest be that a deputation wait upon the Viceroy in Calcutta some time in January next.

Yours faithfully,
S. M. JOHNSON.

THE MUIR MILLS COMPANY, LD.,
CAWNPORE, *16th October* 1903.

DEAR SIR,

You will remember that I ventured to address you in January last regarding the necessity of endeavouring to remove the cruel impost under which cotton mills in India were labouring. You will also doubtless remember that this appeal caused very considerable commotion in Lancashire and led to a deputation being sent by that county to the Secretary of State for India for the repeal of both the Cotton Import and the Excise Duties.

2. Our Lancashire friends would not draw any distinction between the two duties, would not see, or at all events would not allow it to be seen, that the Cotton Import Duties were required by India for revenue purposes, in identically the same way as the duty on Corn was required—at the time it was imposed—for revenue purposes by Great Britain, nor would they see, or allow it to be seen, that the countervailing Excise Duty in India was and is an iniquitous impost. Because (1) it is not required for revenue purposes, (2) it is not a countervailing duty in the sense of being a duty on goods manufactured in India which are similar to goods manufactured in Great Britain and imported into India, and (3) it is a tax on a growing home industry.

3. They would not allow any of these considerations to have the slightest weight, although they had at the time a practical illustration—of what in our case they call Protection—at their very doors in the non-imposition by the British Government of countervailing duties on corn.

4. The result of the deputation to the Secretary of State and the subsequent appeal to Parliament was, as you know, the rejection of the proposal to repeal the cotton import and excise duties.

5. But there was one link in the chain of arguments advanced by us against excise duties which has always appeared to me a very weak one, and that was the failure to adduce proof that the cotton goods imported into India from Great Britain were not similar to those manufactured in India: for example, if we could prove that the Mills in Lancashire did not make any counts of yarn lower than 20s., an appeal to Government here to exempt from duty all goods manufactured in India from yarn lower than 20s. would, I take it, be irresistible. And to enable a conclusion to be arrived at on this point I have been endeavouring to ascertain if Cotton Mills in Lancashire had to submit returns to their Government month by month of *their* outturn: their outturn in pounds of yarn count by count: their manufacture of cloth of every description: the quantities bleached, calendered, dyed and printed. And I have further been endeavouring to obtain from the Board of Trade through friends the published statements of all these interesting figures.

6. But my endeavours have all been in vain, for I find that no such statements are rendered. I have been informed that, "incredible as it may seem, the only information that Lancashire Mills have to furnish Government with is as to the number of hands employed and as to subsidiary matters (such as accidents) arising from the Factory Acts." I am also informed on unimpeachable authority that there are no official statistics to indicate production of cotton yarn and cloth in Great Britain other than those of the raw materials imported and the cotton yarns and goods exported.

7. The information now given is confirmed by a letter I have received from the Bombay Millowners' Association (copies of the correspondence enclosed), from which it will be seen that the Secretary of the Federation of Master Cotton Spinners in Manchester states, "Our Mills are not under any obligation to make returns to the Government of the kind indicated." This will come as a surprise to, I think, most people interested in the Indian Cotton Industry, and it removes any present hope of showing by indisputable figures that there is no competition between our productions and those of Lancashire.

8. But I do not think there is any cause for despair: on the contrary, it appears to me that we should once again press the matter on the attention of Government, and urge that as the excise is admittedly only a countervailing duty it should only be levied on such productions as are similar to those made in Lancashire, and that for this purpose it is essential that details of production should be furnished to Government by the Lancashire Mills. As, however, these are not likely to be given, or given within a reasonable time, we should make the fact of non-existence of data (proving that our productions compete with those of Lancashire) the ground for a fresh appeal to Government for the abolition of excise, and further press upon Government the injustice of returns of yarn production being called for from Indian Mills while Lancashire Mills are free, and urge their immediate abolition also.

9. It will not be difficult to show that rival industries not only in Lancashire but in America, in Europe, in China and Japan are benefited by the knowledge of what Indian Cotton Mills produce, while we are entirely in ignorance regarding theirs. And it must be only a matter of time for every other industry in the country to become subject to the same unjust laws. Leather, Jute, Iron, Paper, Wool must become liable to excise duty the moment those interested are powerful enough to influence the party in power at Westminster. It is but a short time ago that a writer in a Scotch paper insisted that India was an agricultural country and had no business to have Jute Mills in Calcutta since all the Jute could go to Dundee and be worked up there. We live therefore in a constant state of apprehension that pressure is being applied in some direction or other to our disadvantage: it may be towards curtailing the hours of labour, or of still further restricting the employment of children: some change which will make our industries more difficult to work or more irksome to the workers or less profitable to the Proprietors. It behoves therefore every one interested in India's main industry to urge to the utmost of his power the abolition of excise duties on cotton cloth and the absolute stoppage of returns which disclose details of our production. The methods by which these objects are to be attained must be left to individuals and to firms themselves, but I beg to suggest that representations be made to Chambers of Commerce and to other Associations and their support enlisted, and that a joint appeal be made to the Government of India direct by all Cotton Mills in the country.

Yours faithfully,
S. M. JOHNSON,
Muir Mills Co., Cawnpore.

THE MUIR MILLS COMPANY, LD.,
CAWNPORE, *26th October* 1904.

To PRESS.

DEAR SIR,

I enclose copy of a letter I have addressed to all Cotton Mills in India.

Since the subject of excise duties was last taken up by me I have ascertained definitely that Lancashire Cotton Mills are not required to submit any monthly statements of yarn outturn as have to be submitted in India under Sec. 31, Act II of 1896.

The returns of cloth outturn are of course necessary so long as excise is levied, but the returns for yarn are not necessary except to be used for statistical purposes by Government.

I want to urge that these yarn returns should be abolished.

Further, since Lancashire cannot prove that our productions are similar to theirs, I think we should urge that the absence of data is fresh ground for urging the abolition of Cotton Excise Duty, or, at all events, the greater portion.

The gross outturn of Cotton yarn in India is in round numbers 600 million pounds per annum: of this quantity 500 million pounds are coarse counts, *i.e.*, '20s' and under: 84 millions are of counts '31s' to '30s' and the remaining 16 millions are of counts over '30s.'

If Lancashire had to submit by law returns of their yarn outturn we would know exactly what counts of yarn were made, and a comparison with the outturn of Indian Mills could be effected. But as no returns are made this cannot be done.

We know that Lancashire does not export to India coarse goods, that is goods made of counts 20 and under, because it uses practically nothing but American and Egyptian cotton, and to use such cotton for coarse goods would be much like using a thoroughbred racer as a cart horse: the cost of the finished article would be prohibitive. Even if Lancashire imported Indian Cotton and made coarse goods out of it she could not sell them in India in competition with Indian Mills.

If Lancashire submitted returns of outturn similar to those submitted by Indian Mills we could tell straight away what proportion of their gross outturn was of 20s count and under, but since this cannot be done we claim exemption from excise on goods made from 20s yarn and under, that is to say five-sixths of our manufactures are of coarse yarns, therefore excise should only be one-sixth of what it now is.

Will you kindly help in pressing the injustice of the present excise duty on the attention of Government and the further injustice of insisting on the disclosure of our yarn production when Lancashire Mills are free.

Yours faithfully,
S. M. JOHNSON.

THE MUIR MILLS COMPANY, LD.,
CAWNPORE, *3rd November* 1903.

THE SECRETARY,
MILLOWNERS' ASSOCIATION,
BOMBAY.

DEAR SIR,

In continuation of my letter of the 27th ultimo I trust I may be excused for urging that it is of the utmost importance that the present cold season should not be allowed to slip away without an effort to effect a combination of all Indian Cotton Mills on the subject of excise.

From the replies I have received I conclude that every Cotton Mill in India would join such a movement. No more suitable body could be found to espouse the cause than the Bombay Cotton Mills Association, and no more suitable place could be fixed upon than Bombay. But there is no time for delay, as if a deputation to the Viceroy is decided upon and the proposal is favourably received, it should be prepared to proceed to Calcutta not later than January next.

Yours faithfully,
S. M. JOHNSON.

MILLOWNERS' ASSOCIATION,
BOMBAY, *9th November* 1903.

S. M. JOHNSON, ESQ.,
MUIR MILLS CO., LD.,
CAWNPORE.

DEAR SIR,

I am directed by the Committee of the Bombay Millowners' Association to thank you for your letters of the 27th October and of the 3rd instant in which you urge the Committee to convene a meeting of representatives of all cotton mills in India for purpose of concerting measures to procure—

(*a*) the abolition of the Excise Duties upon cloth ;

(*b*) the abolition of the Returns of Production required from Indian Mills.

These two questions appear to my Committee to be distinct. Concerning the Returns of Production I am to say that my Committee are not satisfied that the abolition of these Returns is absolutely desirable. It is true that their preparation entails some trouble on Millowners ; but the statistics so constituted are more valuable to persons and bodies who, like this Association, are concerned with the study of the Indian Industry than they can possibly be to any foreign competitor. It will be admitted that this view is not held without considerable experience of what is necessary to the study and to the presentation to Government of questions relating to the industry ; and while my Committee wish that similar statistics relating to production in the United Kingdom were available, they do not understand that any serious proposal has been made that the institution of a similar system of Returns in the United Kingdom should be demanded by Indian Millowners.

With regard to the question of Excise, it is only with great reluctance that the Committee have decided not to move at the present time. It cannot be supposed that the Millowners of Bombay are less concerned than others to obtain the removal of these charges. The Committee watch attentively for any opportunity of raising the question effectively; but, on the one hand, they would be sorry to move without some apparent prospect of success, and, on the other hand, they are unable to discover in the well-founded consensus of opinion among Millowners any grounds for hoping that Government will, in deference to such opinion, depart from the principle laid down so explicitly in their letter of which a copy was attached to mine of the 9th March last.

The Committee regret, therefore, that at the present juncture they could not look for any practical advantage to the cause from the convening of such a meeting as you suggest.

I am, dear Sir,
Yours faithfully,
FREDERICK NOEL-PATON,
Secretary.

THE KRISHNA MILLS, LIMITED,
BEAWAR, *25th October* 1903.

THE SECRETARY,
MILLOWNERS' ASSOCIATION,
BOMBAY.

DEAR SIR,

Please register the name of our Company as a member of your Association and let us know what money we should send to have our subscription credited in the books of the Association.

At the same time we send a copy of our reply to Mr. Johnson's letter and will be glad to know the views of the Association on the subject. We think whatsoever Mr. Johnson suggests in the matter is quite fair and must be paid immediate attention in the benefits of the Association—its members and the Indian industry in general. We understand unless a meeting of all the Millowners is called nothing could be settled merely by correspondence, and we also suggest to make the Association an Association of Millowners of all India, and every attempt should be made to make all the Indian Millowners members of the same.

Awaiting a reply.

We are, dear Sir, yours faithfully,
THAKURDAS KHINYRAJ & Co.,
Agents.

MILLOWNERS' ASSOCIATION,
BOMBAY, *13th November* 1903.

THE AGENTS,
THE KRISHNA MILLS, LTD.,
BEAWAR.

DEAR SIRS,

I am directed to acknowledge the receipt of your letter of the 25th ultimo and to say that your Mill will be placed on the list of members of the Bombay Millowners' Association as desired. The subscription for the quarter ending 31st December 1903 is Rs. 18-8-8, which kindly remit. I send under separate cover a copy of the last published Report of the Association.

The Committee at their last meeting considered most sympathetically certain letters they had received from Mr. Johnson of Cawnpore on the subject of certain efforts which it is proposed to make for the abolition of the Excise Duty on cloth. But they find it impossible to share Mr. Johnson's hopes as to the result to be expected from such efforts.

In the face of the extremely explicit statements made by Government on the subject the Committee feel that further agitation in the direction indicated would certainly be fruitless and would therefore do nothing but injure their usefulness in other directions.

I am, dear Sirs,
Yours faithfully,
FREDERICK NOEL-PATON,
Secretary.

THE MUIR MILLS COMPANY, LIMITED,
CAWNPORE, 22*nd November* 1903.

THE SECRETARY,
MILLOWNERS' ASSOCIATION,
BOMBAY.

DEAR SIR,

I have to acknowledge with thanks receipt of your letter of the 9th November and am sorry to find that on both the questions raised by me, *viz.*, the removal of excise duties on cotton cloth, and the abolition of returns of production, the Committee of the Association are disinclined to take any action whatever, even to the extent of convening a meeting with a view to ascertain the views on the subject of those most interested.

2. The decision is I hope not an irrevocable one, because as it stands it militates against direct action by Millowners themselves and precludes any present hope of relief.

3. You say the Committee are not satisfied that the abolition of these returns is absolutely desirable, and that the statistics thus obtained are valuable to Associations and others concerned with the study of the Indian industry. But if the experience of Lancashire and the business talent of Great Britain are of any value at all as a guide, it is quite clear the preparations there of these statistics has not been considered desirable or in the least degree valuable for any purpose whatever. And if similar statistics have not been found necessary to the study of questions relating to the industry in so highly organized a county as Lancashire, I fail to see why they should be necessary in India, where at all events we have the experience and the expert knowledge of Lancashire to fall back upon in all doubtful questions affecting the cotton industry.

4. The question therefore resolves itself into one concerning Cotton Mills individually, and I summit that in such matters the opinions of the people concerned should certainly be obtained before any definite course of action is decided upon.

5. For myself I may say I have never found the knowledge of what counts of yarn or what quantities of yarn were made in different Provinces of India to be of the least assistance to me in my work, or that it led to any more profitable results, though the statistics themselves may possibly have an academic value.

6. The preparation of yarn returns entails a certain amount of labour, but if that were the only objection it might be brushed aside as trivial. The real objection is I consider that the present practice discloses details of our production to the public, and since publication is not considered necessary in Great Britain it ought not to be enforced in India. If the views of other Mill Agents or Managers coincide with mine on this point it appears to me that the Bombay Millowners' Association should proceed to represent those views, and do all in its power to procure the abolition of these obnoxious returns.

7. The question of excise is, as the Committee rightly state, a distinct one. In regard to it I note the Committee do not consider the opportunity a fitting one to raise the question effectively. But here also I would ask whether the views of Millowners should not be obtained in the first instance ? I am aware that a number of factories are not members of the Bombay Millowners' Association, but may I be allowed to suggest that more active sympathy on the part of the Committee towards Cotton Mill interests might be the means of creating a large membership ?

8. The fact that no returns of production are made in England appears to others as well as myself fresh ground for asking that the Excise Duty should be removed. The reasons are as familiar to your Committee as they are to me, and I need not recapitulate them, but the Committee will remember that from the outset we have contended that Lancashire does not export to India the coarse goods we manufacture ; analysis of the counts of yarn in cloth would be deceptive and practically impossible. So that the only method would be to compare the counts of yarn spun in the two countries and levy duties accordingly. But we now discover that no returns of yarn spun are made in Great Britain so that a comparison is impossible.

9. If all Mills in India had definite views on these two points would the Committee of the Association not take steps to have them represented ? It appears to me, and I state it with all due deference, that with so large a possible clientelage the Millowners' Association should endeavour to create or mould definite opinions on matters of policy or practice among those interested in the cotton industry of India. This public opinion is now practically non-existent. Take for example the endeavours of the British Cotton Growing Association to improve and extend the growth of Cotton in India. So far as I am aware these have met with but little response out here though they far more vitally affect our interests than those of Lancashire.

10. I would, therefore, beg of you to kindly place this letter before your Committee, and I hope on reconsideration they will view my request that a meeting of all Cotton Mills in India be convened and their opinions on these two subjects elicited as a reasonable one. There should be no question as to who are members of the Association or who are not ; the matters vitally affect us all and united action is imperative.

11. Another argument which might be adduced as a reason that excise should be abolished, and which I do not think has been advanced up to now, is that the returns of cloth made have become so elaborate that there are now no fewer than 97 classes under which all cloth manufactured must be tabulated. The refinement is so great that it would almost appear as if the object in view was not the gathering in of a few extra rupees by way of duty, but the disclosure of the actual processes in force at our Mills as well as the actual production. Nothing is omitted ; if a cloth is bleached *that* has to be shown, if it is calendered or dyed or printed, each has to be shown ; and the cloth is subjected to higher duty, although these processes are not always carried out by the factory that originally made the cloth.

12. The elaborate returns thus sent out find their way ultimately to the India Office where they are at the disposal of every Chamber of Commerce in the United Kingdom, and from the latter dissemination abroad cannot be difficult.

Yours faithfully,
S. M. JOHNSON.

THE MUIR MILLS COMPANY, LD.,
CAWNPORE, *2nd December* 1903.

THE SECRETARY,
MILLOWNERS' ASSOCIATION,
BOMBAY.

DEAR SIR,

In continuation of my letter of the 22nd ultimo I would further suggest to the Committee that the proposed amendment of the Merchandise Marks Act, by which the actual average

count of yarn spun is not to be more than a quarter of a count higher or lower than the declared count, might also with advantage be discussed by a meeting of all Millowners or Agents if one were convened.

At a time when, in spite of the depressed condition of the industry, suggestions are being made in England to still further harass it, it appears that combination of some kind is absolutely imperative.

Yours faithfully,

S. M. JOHNSON,

Managing Director.

MILLOWNERS' ASSOCIATION,
BOMBAY, *5th December* 1903.

S. M. JOHNSON, ESQ.,

CAWNPORE.

DEAR SIR,

I am directed by the Committee of the Bombay Millowners' Association to thank you for your further letter of the 22nd November on the abolition of the Excise Duties and of the returns of production and to say that the Committee will be glad to meet you on the subject when you happen to be in Bombay.

Yours faithfully,

FREDERICK NOEL-PATON,

Secretary.

P.S.—Your letter of the 2nd instant to hand. I am directed to say that the proposed amendment of the Merchandise Marks Act might form another subject of conversation with you when you are able to come to Bombay.

THE MUIR MILLS COMPANY, LD.,
CAWNPORE, *9th December* 1903.

THE SECRETARY,

MILLOWNERS' ASSOCIATION,

BOMBAY.

DEAR SIR,

I beg to acknowledge receipt of your letter of the 5th instant, and in reply would mention that I would in ordinary circumstances not visit Bombay until I am on my way to England in March or April next, so that if I come to Bombay now it will be solely to meet the Committee. If, however, the Committee think my coming will further the object in view, *viz.*, the organization of a great combination of all interested in Indian Cotton Mills, I shall be glad to do so and would ask if the 2nd or 3rd of January would be convenient.

Yours faithfully,

S. M. JOHNSON,

Managing Director.

Telegram, dated 21st December 1903, from the Muir Mills Co., Ld., Cawnpore, to Bombay Millowners' Association :—

" Will Committee be able to meet Mr. Johnson on second or third January ? Kindly wire reply."

Telegram, dated 21st December 1903, from Bombay Millowners' Association to Muir Mills Co., Ld., Cawnpore :—

" Regret second January holiday ; third Sunday."

Telegram, dated 28th December 1903, from Muir Mills Co., Ld., Cawnpore, to Bombay Millowners' Association :—

" Will Committee be able to meet Mr. Johnson on Monday, fourth January ? Kindly wire reply."

Telegram, dated 29th December 1903, from Bombay Millowners' Association to Muir Mills Co., Ld., Cawnpore :—

" Your Telegram, 28th. Committee regret cannot arrange meeting this time of year."

THE KRISHNA MILLS, LD.,

BEAWAR, *26th December* 1903.

THE SECRETARY, BOMBAY MILLOWNERS' ASSOCIATION.

DEAR SIR,

We have received from Mr. Johnson of the Muir Mills, Cawnpore, copies of correspondence between your body and that gentleman, and with regard to the same have to say that it is very essential to combine all the Indian mills in one Association so that the problem could be solved very easily by calling a meeting of all the millowners of the country. When last year Mr. Johnson raised the question of sending a deputation and to make agitation regarding Excise Duty and production returns, we had explained this to that gentleman and also to your Association that until a wholesale meeting of all the cotton concerns was convened no conclusion could be arrived at ; and now we regret to note that the Association is not prepared nor recognises the necessity of convening a meeting of those most interested in cotton spinning and weaving industry of India who suffer most from the cruel effect of the Cotton Excise Duty. It may be possible to suppose that as is expected by Mr. Johnson we may succeed in getting the duty repealed, if not, may we ask, what harm the Association is afraid of in calling a general meeting of the leaders of the industry. We are aware of many mills not being members of the Association, but when it understands that its members too are no less sufferers from the baneful effects of this duty, we see no cause why it should be jealous of the benefit others may derive through its endeavours in common with its long list of members. On the other hand we sincerely hope that by calling a meeting of all the millowners of the country the Association may succeed in securing good many more members and could extend its sphere of usefulness from Bombay to all over Indian Empire. We also totally agree with Mr. Johnson in his views regarding the awkwardness of returns preparation and as enough has been said by that gentleman in this behalf, we have no more to say but endorse in full his so ripe views and ask the favour of your advising your Committee to reconsider the matter and convene a general meeting of all the millowners of the country to consider the points raised by Mr. Johnson at the sacrifice of his so precious time and thoughts and to combine themselves in one signal body. As at present the legislation regarding the amendment of law about reeled yarn is under consideration of the Government of India, we see the requirement above referred being all the more in time just now and we shall be obliged by your enlighting us on the final view your Committee hold on the matter.

Yours faithfully,

THAKURDAS KHINVRAJ & Co.

MILLOWNERS' ASSOCIATION,
BOMBAY, 11*th January* 1904.

THE SECRETARIES, TREASURERS AND AGENTS,
KRISHNA MILLS, LTD.,
BEAWAR.

DEAR SIRS,

I am directed to acknowledge the receipt of your letter of the 26th ultimo, which has been read with interest by the Committee of this Association. I am, however, to refer you to my communication of the 13th November 1903, and to say that the Committee remain of the opinion therein expressed and do not think any useful purpose would be served by moving in the matter referred to. I am, however, to assure you that the matter is not lost sight of by the Committee, and that if any opportunity should arise of intervening effectually, they would not fail to act.

Yours faithfully,
FREDERICK NOEL-PATON,
Secretary.

THE COTTON EMPLOYERS' PARLIAMENTARY ASSOCIATION
AND
THE UNITED TEXTILE FACTORY WORKS' ASSOCIATION

(*Representing the whole Cotton Trade as Employers and Operatives*).

35-36, EXAMINER BUILDINGS,
STRUTT STREET,
MANCHESTER, *June 24th*, 1903.

To

THE PRESIDENT AND MEMBERS OF THE BOMBAY
MILLOWNERS' ASSOCIATION.

Re Import and Excise Duties on Cotton Goods.

GENTLEMEN,

At a joint meeting of accredited representatives of the Lancashire Master Cotton Spinning and Manufacturing Associations together with representatives of the various Cotton Operatives' Associations, held on Friday last, the 19th instant, it was unanimously decided to approach you with a view of ascertaining whether the time is not opportune and whether it would not be to our joint interests that an agitation should be commenced by your Association in India and ours in England for the entire abolition of the import duty on cotton goods and the countervailing excise duty levied on your production.

Our Joint Committee is strongly of opinion that the operation of these duties acts injuriously to our respective industries, inasmuch as they restrict the purchasing power of the consumer.

As you are aware, when these duties were reimposed in 1894, we vigourously protested against cotton yarns and cloth being subject to duty, but we were told by Sir Henry Fowler that " it was a closed question that there should be any exemption from the operation of these duties, " also that owing to the fall in the value of the rupee these duties were required for the Exchequer. We accepted under protest " the necessity which it was alleged had arisen for the levying of the duties," providing they were properly countervailed so long as the duties were in operation.

On December 12th, 1895, Lord George Hamilton informed a large and influential deputation that when a " satisfactory equilibrium had been established between income and expenditure the cotton duties should be the first to receive consideration."

We have watched with great interest and satisfaction the improved condition of the Indian Finances and feel that the time has come when our request for the fulfilment of this promise is justified.

From the pledges that have been given by the Secretary of State for India and the Indian Government it is obvious that it is futile for either you or us to ask for the abolition of one duty whilst the other remains in operation.

We have no desire to propose anything which would be detrimental to the best interests of India, and as we are of opinion that you are better judges than ourselves as to whether the present is an opportune time to agitate for the entire abolition of both duties, we respectfully ask for your opinion on this subject, believing as we do, that in this matter your interests and ours are identical.

We trust that your Association will receive this communication in the spirit that has inspired it, which is that of establishing friendly relations with you.

We are, yours faithfully,

WILLIAM TATTERSALL,
Secy., The Cotton Employers' Parliamentary Association,
JOSEPH CROSS,
Secy., The United Textile Factory Workers' Association,
} Joint Secretaries.

MILLOWNERS' ASSOCIATION,
BOMBAY, 20*th August* 1903.

THE JOINT SECRETARIES,
THE COTTON EMPLOYERS' PARLIAMENTARY ASSOCIATION
and
THE UNITED TEXTILE FACTORY WORKERS' ASSOCIATION,
35-36, EXAMINER BUILDINGS, STRUTT STREET,
MANCHESTER.

DEAR SIRS,

Under the instructions of the Committee of the Bombay Millowners' Association I beg to acknowledge, with thanks, the receipt of your letter of the 24th June 1903, in which you suggest the desirability of joint action with a view to the entire abolition of the Import Duty on Cotton Goods and the Countervailing Excise Duty levied on the production of Indian Mills.

In reply, I am to say that the expediency of taking further action in the matter of the abolition of these duties was recently considered by my Committee with great fulness. They were, however, of opinion that no good result would attend such action as you suggest, at the present time, and they do not feel that anything has since arisen calling for an alteration of that decision.

I am, Dear Sirs,
Yours faithfully,
FREDERICK NOEL-PATON,
Secretary.

Appendix P.

Cotton Duties Act.

(Excise Duty on the Calendered Value of the Cloth.)

Millowners' Association,

Bombay, *8th March* 1904.

The COLLECTOR OF LAND REVENUE, CUSTOMS AND OPIUM,

Bombay.

Sir,

Under the instructions of the Committee of the Bombay Millowners' Association, I have the honour to refer to your letter No. 960-Ex., dated 14th November 1900, on the subject of the levy of Excise Duty upon the final value of goods calendered in an Indian Mill, and to the interview on the same subject had by a Special Committee of this Association with Mr. O'Conor, then Director-General of Statistics, on the 27th of the same month.

2. At that interview it was arranged that the following recommendations should be laid by Mr. O'Conor before the Government of India :—

(*a*) That all mills practising or intending to practise calendering within the mill premises, either in respect of goods made by themselves or in respect of goods sent in from outside, for the express purpose of being calendered, should continue to pay Excise Duty at 3½ per cent. on the full calendered value of all such goods when issued from the premises, unless they could under regulations to be instituted, satisfy the proper Excise Officer that the goods, or part of the goods, were not made on the premises, but introduced under the said regulations for the express purpose of being calendered, and that duty had already been paid upon them in their uncalendered state.

(*b*) That any such mill should be exempt from all such duty on the charges for calendering on its effectively detaching and isolating its Calendering Department from the rest of its premises in such a way as to make such department, to the satisfaction of the proper Excise Officer, a separate calendering work not falling within the purview of the Act.

(*c*) That no such disability as would be implied in the application of the Act to establishments, in which calendering but no weaving is done, should be imposed on such establishments, as such imposition would tend to kill enterprise by establishing a precedent possibly applicable to other auxiliary industries.

3. It was understood that the decision of Government in this matter would be duly communicated to the Association but more than three years have passed without such communication having been made. I am accordingly to beg that you will be good enough to inform the Committee whether any decision has in fact been arrived at, and, if so, what is its nature. Should no decision on the points in question be in your knowledge, my Committee would be indebted if you would communicate with the Government of India on the subject and acquaint them with the result.

I have, &c.,

FREDERICK NOEL-PATON,

Secretary.

No. 212 Ex. of 1904.

Bombay Collector's Office,
Factory Excise Department,
Bombay, 11*th March* 1904.

From

The COLLECTOR OF LAND REVENUE, CUSTOMS AND OPIUM,
Bombay.

To

The SECRETARY, MILLOWNERS' ASSOCIATION,
Bombay.

Sir,

With reference to your letter, dated 8th instant, I have the honour to inform you that orders on the subject were issued by the Government of India in February 1901.

2. In practical effect they are identical with clauses (*a*), (*b*), and (*c*) of paragraph 2 of your letter.

I have, &c.,
E. GRAY,
Collector of Land Revenue, Customs and Opium, Bombay.

Millowners' Association,
Bombay, 11*th March* 1904.

The COLLECTOR OF LAND REVENUE, CUSTOMS AND OPIUM,
Bombay.

Sir,

In acknowledging with thanks the receipt of your letter No. 212 Ex. of this date, I am directed to ask you to kindly favour the Committee with a copy of the orders in question, or if this is not convenient to say where they can be found.

I have, &c.,
FREDERICK NOEL-PATON,
Secretary.

No. 220 Ex. of 1904.

Bombay Collector's Office,
Factory Excise Department,
Bombay, 15*th March* 1904.

From

The COLLECTOR OF LAND REVENUE, CUSTOMS AND OPIUM,
Bombay.

To

The SECRETARY, MILLOWNERS' ASSOCIATION,
Bombay.

Sir,

I have the honour to acknowledge the receipt of your letter, dated the 11th instant.

2. I regret I am unable to supply you with a copy of the orders in question, they being contained in a correspondence underlying a Resolution of the Government of Bombay.

3. Their substance, however, is correctly given in your letter of the 8th instant, and I shall be glad to supply information as far as possible on any points which may remain doubtful.

I have, &c.,

J. R. MARTIN,

for Collector of Land Revenue, Customs and Opium, Bombay.

MILLOWNERS' ASSOCIATION,
BOMBAY, 26*th March* 1904.

THE SECRETARY TO GOVERNMENT,
GENERAL DEPARTMENT,
BOMBAY.

SIR,

Under the instructions of the Committee of the Bombay Millowners' Association, I have the honour to hand you copy of correspondence that has passed between the Association and the Collector of Land Revenue, Customs and Opium, Bombay, on the subject of the assessment of Calendered Cotton Goods to Excise.

2. I am to submit that in view of the discussion of this question in 1900 and the known interest of the Association in its settlement, intimation of the orders passed in this matter, so long ago as February 1901, ought to have been duly given. And I am to beg that His Excellency the Governor in Council may be pleased to issue instructions that orders of the nature in question when they affect the industry should not be withheld from their knowledge.

I have, &c.,

FREDERICK NOEL-PATON,
Secretary.

No. 3150 OF 1904.

REVENUE DEPARTMENT,
BOMBAY CASTLE, 26*th April* 1904.

To

THE SECRETARY, MILLOWNERS' ASSOCIATION,
BOMBAY.

SIR,

I am directed to acknowledge the receipt of your letter, dated 26th March 1904, and in reply to state that the Collector of Customs, Bombay, has been instructed to comply as far as possible with the request made in the concluding portion of it.

I have, &c.,

G. F. KEATINGE,
Under-Secretary to Government.

Appendix Q.

Alleged Short-reeling of Yarn in Indian Mills.

No. 5440-S.R.

GOVERNMENT OF INDIA,
FINANCE AND COMMERCE DEPARTMENT,
SIMLA, *the 4th September* 1903.

FROM

J. CAMPBELL, ESQ., I.C.S.,
OFFG. UNDER-SECRETARY TO THE GOVERNMENT OF INDIA.

To

THE SECRETARY, BOMBAY MILLOWNERS' ASSOCIATION.

SIR,

With reference to your letter to the Government of Bombay, Revenue Department, dated the 27th October 1902, regarding the short-reeling of yarn in Indian mills, I am directed to say that the Government of India have decided that measures should be taken to stop the practice of short-reeling yarn which is intended for sale in India; and with this end in view they consider that prosecutions should be instituted against persons who intentionally manufacture short-reeled yarn for sale in India. The Government of India desire, however, to avoid interference with the trade in yarn manufactured for export; and they think it necessary to draw up very precise instructions for the guidance of the Inspectors of Factories by whom these prosecutions would be instituted, defining accurately the class of cases in which proceedings should be taken, and indicating the method by which such cases should be investigated. The Government of India accordingly propose to appoint a small Committee of which the Commissioner of Customs, Bombay, will be the Chairman, to consider this question in detail, and to frame the necessary instructions. It has been decided that the Committee shall assemble at Bombay on the 1st of October next.

2. I am directed to request that the Bombay Millowners' Association will be so good as to nominate a representative to serve on the Committee. The name of the gentleman nominated should be intimated to the Government of India at as early a date as possible.

I have, &c.,
J. CAMPBELL,
Offg. Under-Secretary to the Govt. of India.

COPY forwarded to the Director-General of Statistics with the intimation that he will be appointed a member of the Committee referred to above, and that arrangements should be made accordingly.

COPY also forwarded to the Government of Bombay, Revenue Department, with reference to the letter from that Government, No. 5726, dated the 24th August 1903.

MILLOWNERS' ASSOCIATION,
BOMBAY, 10*th September* 1903.

To

THE OFFG. UNDER-SECRETARY TO THE GOVERNMENT OF INDIA,
FINANCE AND COMMERCE DEPARTMENT,
SIMLA.

SIR,

I am directed by the Committee of the Bombay Millowners' Association to acknowledge the receipt of your letter, No. 5440-S.R. of the 4th instant, and to say that they have appointed Mr. Sassoon J. David to represent them on the small Committee which is being appointed by Government to consider the measures to be adopted to stop short-reeling of yarn in Indian mills, and to frame the necessary instructions for the guidance of the Inspectors of Factories by whom prosecutions would be instituted.

I have, &c.,
FREDERICK NOEL-PATON,
Secretary.

No. 5800-S.R.

GOVERNMENT OF INDIA,
FINANCE AND COMMERCE DEPARTMENT.
STATISTICS AND COMMERCE.

Custom.

RESOLUTION.

SIMLA, *the 24th September* 1903.

THE attention of the Government of India has been called to the prevalence of the practice of fraudulently short-reeling yarns; and representations have been made urging the Government to take steps to check the growth of this evil, which is stated to be particularly injurious in India, as many of the consumers are ignorant and easily imposed on, while the conditions of the trade are such that all manufacturers must adopt a similar procedure, if they are to compete successfully with producers who fraudulently short-reel their yarn.

2. The opinions of the Local Governments and of the Chambers of Commerce have been obtained and considered; and there is practical unanimity as to the desirability of stopping the practice. Short-reeling is declared to be indefensible and avoidable; and it is suggested that prosecutions should be instituted where necessary. The Government of India accept these opinions, and consider that millowners, who fraudulently manufacture short-reeled yarn for sale in India, should be prosecuted.

3. It appears, however, that the conditions of the foreign yarn trade are such that any interference with trade custom as regards reeling for these markets would place Indian producers at a disadvantage; and it is therefore considered advisable to place no restrictions upon the make-up of yarn which is not sold in British India.

4. The procedure by which the Home market can be protected, while the foreign trade is left unrestricted, will necessarily be somewhat complicated and will depend largely upon purely technical considerations. The Government of India have, therefore, decided to appoint a Committee to consider this matter, and to draw up precise instructions as to the procedure to be

observed in instituting prosecutions, the method of testing to be employed, the manner in which machinery should be inspected, and the circumstances in which such inspection should be made. The Committee should also formulate definite instructions prescribing any supplementary action which they may consider necessary in order to give effect to the decision that fraudulent short-reeling of yarn sold in British India should be made the subject of criminal prosecutions.

The Government of India do not desire, however, that legislation should be resorted to unless the Committee consider this imperative.

5. The Committee will assemble at Bombay on the 1st day of October 1903 ; it will be presided over by the Commissioner of Customs, Bombay, and will be composed of the following gentlemen :—

Mr. J. L. Jenkins, I.C.S., Commissioner of Customs, Salt, Opium and Abkari, and Reporter-General of External Commerce, Bombay. } *Chairman.*

Mr. R. E. Enthoven, I.C.S., Officiating Director-General of Statistics.
Mr. C. H. Armstrong, Representative of the Bombay Chamber of Commerce.
Mr. S. J. David, Representative of the Bombay Millowners' Association.
Mr. L. B. Ker, Representative of the Karachi Chamber of Commerce. } *Members.*

Mr. L. W. Hartley, Presidency Inspector of Factories, Bombay. *Secretary.*

6. The Government of India trust that the Committee may be able to submit their report, which should be forwarded direct, before the end of October.

ORDERED, that a copy of this Resolution be forwarded to the Government of Bombay, Revenue Department, in continuation of the communication from this Department, No. 5440-S.R., dated the 4th September 1903.

ORDERED also that the Resolution be communicated to the Chairman and members, and to the Secretary of the Committee.

J. CAMPBELL,
Offg. Under-Secretary to the Govt. of India.

To

THE SECRETARY TO THE GOVERNMENT OF INDIA,
FINANCE AND COMMERCE DEPARTMENT.

BOMBAY, 1903.

SIR,

I have the honour to submit, for the consideration of the Government of India, the Report of the Committee appointed under Resolution No. 5800-S.R., in the Finance and Commerce Department, dated the 24th September 1903, to consider the steps which should be taken to prevent the short-reeling of yarn. A minute of dissent by Mr. Sassoon J. David, the representative of the Bombay Millowners' Association, who has found himself unable to assent to all the recommendations of the Committee, is appended to the Report.

2. I have arranged that 100 copies of the Report shall be forwarded to you direct from the Government Central Press, Bombay.

I have, &c.,
J. L. JENKINS,
Commissioner of Customs, Salt, Opium and Abkari.

Report of the Committee appointed under Government of India Resolution, No. 5800-S. R., Finance and Commerce Department, dated September 24th, 1903, to consider and propose measures for the suppression of fraudulent short-reeling of yarns in India.

The instructions contained in paragraph 4 of the Resolution, appointing our Committee, direct us to draw up precise instructions as to—

(1) the procedure to be observed in instituting prosecutions,

(2) the method of testing to be employed,

(3) the manner in which machinery should be inspected, and

(4) the circumstances in which such inspection should be made,

and it is stated that the Government of India do not desire that legislation should be resorted to unless we consider it imperative.

2. We have prepared four drafts, A, B, C and D, which are attached to this Report, illustrating the action that is in our opinion required in order to check the practice of fraudulent short-reeling. We proceed to discuss these drafts shortly in order to explain their necessity.

DRAFT **A.**

3. This is an amendment to the Merchandise Marks Act. It can only be given effect to by legislation. We have not overlooked the objection of the Government of India to legislation, but we are of opinion that no measures under the existing provisions of the Merchandise Marks Act can be effective unless the Act is first amended as proposed by us. We venture to point out that by no provision of the existing law is the manufacturer or seller of Indian yarns subject to any penalty for dealing in yarns not marked with the number of the count or the name of the mill of origin. The practice at present among manufacturers is to stamp the wrappers of the bundles of yarn, as also the coverings of the bales, with these particulars. Yarn is occasionally issued from up-country mills in loose knots or in bundles bearing no wrappers, in which case it does not bear any indication of the count number or mill of origin. It seems to us that, if the fixing of a false count number is to be made, in future, the subject of criminal prosecutions, manufacturers who desired to continue the present practice of fraudulent short-reeling would merely discontinue the stamping of the bundles and bales with the count number. They would then be beyond the reach of the law regulating false trade marks. We do not know of any provision of the Merchandise Marks Act which renders the 'make up' of a bundle of yarn equivalent to a trade mark showing the count of the yarn contained.

4. This being the case, we have drafted a section (*vide* Draft A) that we propose for insertion after section 12 (1) of the Merchandise Marks Act rendering it compulsory on all manufacturers and dealers in yarn to issue, or deal in, only such bundles or bales as have been marked conspicuously with the number of the count, the weight of the bundle, and the name of the mill of origin. We have also proposed corresponding additions to sections 12 (2) to bring it in harmony with section 12 (1) as amended.

5. Further we recognise that, though it is at present not the practice to issue yarn unbundled from mill premises, any provision of the law rendering it necessary to mark bundles with the count number would constitute an inducement to manufacturers and dealers to deal in unbundled yarn, whenever they wish to protect themselves from the consequences of short-reeling. It is clear that no indication of count can be affixed to loose knots of yarn, in whatever quantities they are sold. We understand that, inasmuch as yarn is almost entirely dealt with in bundles or bales at the present time, no hardship can be caused by prescribing that all yarn issued from the mills shall be so bundled (when it *ipso facto* becomes liable to be marked with the count), and we have embodied in the proposed amendment to section 12 of the Merchandise Marks Act (Draft A) clauses rendering bundling compulsory before issue from the mill premises.

6. We consider that Draft A. consititutes the minimum legislation required if the practice of producing and dealing in short-reeled yarns is in future to render the producer and dealer subject to legal penalties.

DRAFT **B.**

7. Having thus established the legal liability of manufacturers and dealers for producing or dealing in short-reeled yarns, we have next prepared a notification for issue under section 16 (1) of the Merchandise Marks Act describing what should be held to constitute short-reeled yarn or yarn of false count. The provisions of this notification follow closely the lines of a similar notification already issued for the guidance of Customs Collectors in dealing with imported yarns. The difference is merely in the direction of allowing to Indian spinners a slightly wider margin between actual and indicated count than is permitted in the latter case. It appears to us that the conditions of Indian spinning render it difficult to insist on a higher standard of accuracy without unduly handicapping the industry. It is notorious that at the present time yarns are frequently placed on the Indian market which fall short of the indicated count by as much as 10 or 12 per cent., and we would aim for the present at reducing this irregularity to one-quarter count on yarn below 16s, and one-half count in the case of other yarns. If this standard is attained a great improvement will have been effected in the spinning to the interest of the purchaser. To aim at more would, we consider, in the present conditions of the industry be an excessive demand on the resources of Indian spinners.

8. It will be observed that Draft B relates only to grey yarns. We are of opinion that if short-reeling is to be detected at all, it must be detected before yarns reach the bleached or dyed state ; otherwise the application of a test for count becomes extremely difficult, and the results of such test, owing to the changes in length that yarn undergoes during the processes of bleaching and dyeing, would fail to command confidence.

DRAFT **C.**

9. We have given in Draft C rules regulating the procuring of samples and the testing of yarn. These rules have been framed on technical considerations and we do not propose to discuss them in this report. The allowance of 8½ per cent. allowed in Rule 5 is provisional, pending experience of the results of such tests in India.

DRAFT **D.**

10. In this final draft we have given instructions for Inspectors regarding the institution of proceedings as desired by the Government of India. The general tenor of these instructions is to discourage hasty action. Inspectors are directed to proceed with caution on receipt of credible information. They are required to proceed as far as possible against the manufacturer rather than against dealers. We are of opinion that this is the surest way to suppress fraudulent reeling. The sellers, as a rule, are small dealers, ignorant and of limited means. Prosecutions directed against them, if successful, would undoubtedly tend to discourage the manufacture of short-reeled yarns, since dealers would be inclined to withdraw their custom from mills that supplied them with such troublesome goods. But it is clear that if no short-reeled yarn is produced none will be sold by dealers. Thus a surer way to check the sale is to proceed against the manufacturers when short-reeling is fraudulent (*vide* rule 6).

11. It has been represented to us that the seizure in retail shops of yarn in bundles stamped with incorrect count may not afford evidence of the complicity of manufacturers in the offence, owing to the comparative ease with which the covers of the bundles can be changed. In this way innocent millowners might be put to loss and annoyance by the institution of prosecutions against them in the case of yarn that had not been produced in their mills. We favour a suggestion that has been made to us that millowners should secure themselves against this risk by inserting a ticket wrapped in the centre knot of yarn, bearing the same indications as the covering of the bundle. This suggestion is being brought before the Millowners' Association for consideration. If they adopt it, the risk of millowners being involved unwittingly in prosecutions will, we believe, be very greatly reduced.

12. The Government of India will observe that we have omitted from these instructions all reference to the testing of machinery. We have done this deliberately. We understand that in the case of yarn intended for export to foreign ports outside India no interference with the reeling or marking of yarn is contemplated. We have exempted such yarns from inspection by rule 2 of the rules in Draft D. In these circumstances the inspection of machinery becomes useless. Were it set for short-reeling, the Inspector could not draw any inference regarding the intention of the manufacturer to commit an offence under the Merchandise Marks Act, for the yarn might be intended for export, and would certainly be so described by the millowner. If yarns for export to foreign Ports outside India are to be exempt from interference, the action of an Inspector can only be productive of result when directed against yarn bundled and marked with the count and mill of origin for sale on the local market. Action can be taken either on the mill premises after bundling or in the Indian market.

13. We have now dealt with all the points referred to us by the Government of India. We would conclude our report with the following general remarks and suggestions regarding the probable effects of the action recommended above :—

It has been alleged in the course of our deliberations that the Merchandise Marks Act is not an efficient weapon for the suppression of the evil which we seek to cure, inasmuch as it involves prosecutions in the Courts, often in mufassal Courts, in which proceedings are sometimes unduly protracted, involve inconvenience to the parties, and terminate in the infliction of penalties that are quite inadequate as a deterrent. The Magistrates before whom such cases would ordinarily be tried can with difficulty appreciate the technical points involved. It has been suggested, and the suggestion has met with considerable support, that proceedings similar to those that can now be held under the Sea Customs Act would be far more efficient than the prosecutions that the Merchandise Marks Act permits. But we recognise the difficulty of applying customs to law offences committed outside ordinary customs jurisdiction. There is no precedent for such a form of legislation ; and if it be admitted that proceedings before the Courts are unduly prolonged and fail to secure the infliction of adequate penalties, we consider that a special Act for the suppression of the practice of short-reeling in Indian mills would be a more suitable measure than the legislative extension of the Customs Act to offences committed beyond customs jurisdiction. With the exception of Mr. David, the Members of the Committee would strongly recommend that all cases of this nature should be made triable by the Chief Magistrate of the place where the test is carried out.

14. We would venture to invite attention to the risk of fraudulent short-reeling continuing unchecked in the mills within the limits of Native States, and thus unfairly handicapping the production of British Indian mills. We would suggest that, in event of action being taken in British India to suppress the practice, the governments of the Native States concerned should be invited to co-operate in suppressing similar fraudulent practices in Native State mills by adopting the same measures.

15. Finally, we have to recommend that reasonable opportunity should be allowed to millowners to dispose of their stocks of short-reeled yarns before any action is taken against them. It would not be fair, we consider, to prosecute manufacturers or dealers for yarn short-reeled before such short-reeling was treated as an offence. We would suggest that, after the passing of any legislation of the nature contemplated in this report, a period of 6 months should be allowed for the disposal of stocks of yarn, and that no action should be taken against manufacturers or dealers in respect to yarn found on their premises during that period, if it has been manufactured before the date of the passing of such legislation.

J. L. JENKINS.
R. E. ENTHOVEN.
C. H. ARMSTRONG.
SASSOON J. DAVID.
L. B. KER.
L. W. HARTLEY, *Secretary*.

Draft A.

Proposed addition to the Merchandise Marks Act.

Insert between Section 12 (1) and Section 12 (2) :—

No cotton yarn spun and reeled, or reeled, in such premises which is intended for sale in India shall be removed therefrom except in bundles of 5 or 10 lbs. weight, bearing conspicuously marked thereon the number of the count, the weight of the bundle and the name of the mill in which it has been produced ; and, in the case of yarn that is both bundled and baled, without each bale being similarly marked with the count number and name of the mill of origin. No person shall sell, or expose or have in possession for sale, or for any purpose of trade or manufacture, bundles or bales of yarn manufactured in such premises unless they are so marked with the count and name of the mill of origin.

For section 12 (2) read the following :—

If any person removes or attempts to remove any such piece-goods or yarn from any such premises without the length of each piece, or the count, weight and mill of origin of each bundle or bale being stamped in the manner mentioned in sub-section (1) or without the yarn being bundled as prescribed in the same sub-section, or if any person sells, exposes for sale, or has in possession for any purpose of trade or manufacture yarn in bundles or bales which is not so stamped, every such piece, bundle and bale, and everything used for the packing and removal thereof shall be forfeited to His Majesty, and such person shall be punished with fine which may extend to one thousand rupees.

Draft B.

In exercise of the powers conferred by Section 16 (1) of the Merchandise Marks Act, the Governor-General in Council is pleased to direct that Criminal Courts in giving effect to the provisions of the Act in respect of trade descriptions of grey cotton yarn spun and reeled and intended for sale in India shall observe the following instructions :—

A trade description of count or number, length, or weight, applied to such cotton yarn shall not be deemed false in a material respect unless—

(*a*) the described count or number is greater or less than the actual count or number by more than 5 per cent.; provided that the average count of the whole yarn in question is not greater or less than the prescribed count by more than one-quarter count in the case of yarn of counts below 16, and one-half count in the case of all other yarn; or

(*b*) the average length of the whole number of hanks in a bundle is less than 840 yards by more than 2½ per cent.; or

(*c*) in a bundle of yarn of any count under 50, described as being 10 lbs. in weight, the number of knots of 20 hanks each is not half of, the number of knots of 10 hanks each is not the same as, and the number of knots of 5 hanks is not double, the described count or number of the yarn ; or

(*d*) in a bundle of yarn of any count under 50, described as being 5 lbs. in weight, the number of knots of 20 hanks each is not a quarter, of the described count or number of the yarn ; or

(*e*) in a bundle of yarn of any count from 50 upwards, the number of knots of 20 hanks each is not half, or the number of knots of 40 hanks each is not a quarter, when the described weight is 10 lbs., and is not a quarter or an eighth, as the case may be, when the described weight is 5 lbs. of the count or number of the yarn.

DRAFT C.

Notification under Section 20 of the Merchandise Marks Act regarding determination of character of goods by sampling.

In exercise of the powers conferred by Section 20 (1) of the Indian Merchandise Marks Act, 1889 (as amended by Act IX of 1891), the Governor-General in Council is pleased to make the following rules and orders in respect of cotton yarn manufactured in and intended or exposed for sale in India :—

1. Samples for testing shall not be taken of yarn other than in bundles or bales.

2. The least quantity taken or purchased for sample shall be five bundles, and, when the yarn is contained in bales, at least one bale shall be taken or purchased. When the yarn is not purchased the bale or bundles shall be selected at random from yarn which it is desired to test.

3. The samples shall be securely packed and sealed and transmitted to the officer appointed to make tests in Calcutta, Bombay, Madras, Karachi or Rangoon.

4. The length of the yarn shall be tested by measurement on a wrap reel and the weight of the wrapping shall be the indication of the count.

5. The weight of the yarn shall on demand of either of the parties be ascertained after it has been fully dried, an allowance of 8½ per cent. on the weight thus ascertained being allowed for dryage in calculating the count.

6. The test shall consist in the first instance in the measurement and ascertainment of the count of all the hanks of one bundle selected at random. The person or persons against whom it is proposed to take proceedings if the description should be found to be false (hereafter called the persons interested) shall be invited to be present in person or by agent ; but if they are not present at the date and hour fixed the test shall be made in their absence.

7. If the test shows the description to be false the persons interested shall be informed of the fact and invited to be present at another test the date and hour of which shall be communicated to them.

8. If they do not appear the first test shall be taken as *prima facie* evidence of the length, weight and count of the yarn.

9. If the persons interested appear, a second test shall be made in the same way as the first, and the average result of the two tests shall be taken as *prima facie* evidence of the length, weight and count of the yarn.

10. If at any time during the first or second test the persons interested shall profess themselves satisfied with the results, the tests need not be continued and the results obtained shall be considered conclusive evidence.

11. When proceedings are instituted in the Courts the remainder of the samples shall be kept securely under seal by the testing officer until the conclusion of the proceedings.

12. When during the course of the hearing of a case a further test is ordered by the Court it shall be carried out in accordance with the provisions of rules 4, 5 and 6 above.

DRAFT D.

Instructions for guidance of Factory Inspectors.

1. Factory Inspectors have no statutory powers or duties under the Merchandise Marks Act. In any action which they take under the Act they will virtually be in the position of private complainants.

2. It is nevertheless considered desirable that their services should as far as possible be utilised in the suppression of short-reeling of cotton yarn intended for consumption in India. Yarn intended for export to foreign ports outside India should not be examined unless and until it is exposed for sale in the local market.

3. When an Inspector has reason to suppose that the yarn of a certain mark is short-reeled, he may purchase it in the open market, but it must be noted that under the rules the yarn must be in bundles and at least 5 bundles must be purchased. The bundles should be sealed and marked for purpose of identification and transmitted to . . . to be tested. If the result of the test shows that an offence has been committed, the Inspector should prefer a complaint in the Court having jurisdiction.

4. If the Inspector receives reliable information that there is short-reeled yarn intended for consumption in India either in a factory or in the market, he may prefer a complaint in the Court having jurisdiction, obtain a search warrant and having got possession of the yarn transmit samples to in accordance with the rules.

5. Complaints should as far as possible be preferred against the manufacturers of the yarn rather than the sellers. It should, however, be noted that where yarn manufactured for export has been put on the local market without the connivance of the manufacturer, proceedings must necessarily be taken against the dealers alone.

6. Great caution should be observed in preferring complaints, and action should only be taken upon credible information of the existence of *fraudulent* short-reeling.

7. Only grey yarn should be made the subject of legal proceedings. Bleached and dyed yarns should neither be siezed nor tested.

8. Yarn issued from a mill to be dyed and returned to the mill premises for further manufacture should not ordinarily be made the subject of prosecutions.

MR. DAVID'S NOTE OF DISSENT.

In signing the report I think it necessary to point out that the discussion of the question has not been so general as its importance demands and there has not been sufficient time at our disposal to refer the matter to the general body of members of the Bombay Millowners' Association. I am not aware whether Government has also appointed similar Committees in other centres of the trade, and, if not, whether the result of our deliberations would be regarded as satisfactory and applicable everywhere. I would, therefore, respectfully recommend that both in Bombay and elsewhere the trade should be given an opportunity to report on any draft amendments and rules founded upon the recommendations now made, before such draft amendments become law.

The report now submitted by the Committee provides, in the main, for as practical a solution of the question as it is at present possible to arrive at; but while saying this, I think it is my duty at the same time to point out where I differ from my colleagues on the Committee, to recommend certain alterations that appear to me very desirable, and to make certain further suggestions.

I shall first deal with

Points on which I differ from the Committee.

Draft D-4.—In the "Instructions for Guidance of Factory Inspectors" this paragraph empowers Inspectors to enter Factories with search warrants to test alleged short-reeled yarn. In my opinion this is not at all desirable, as it will create the possibility of inquisitorial intervention, and this is the unanimous opinion of the Millowners' Association. Besides, this paragraph is objectionable for other reasons as well. Instruction 2 lays down that yarn intended for

export should not be examined unless and until it is exposed for sale in the local market. It will be impossible for an Inspector visiting a mill to prove that yarn found therein is not intended for export; and it might be impossible for a manufacturer to prove that it was so intended. The provision would therefore be ineffectual, might give rise to abuses, and would tend to divert the activity of the Inspectors from the more troublesome but more effective procedure of detecting the offence in the open market.

I therefore think this paragraph 4 is not necessary or desirable.

Draft D, para. 10.—In the report itself the two last sentences following the words "troublesome goods" should, I consider, be deleted. It is *not* the intention that "no short-reeled yarn should be produced" but only that no short-reeled yarn should be sold in the Indian market. It cannot be assumed that if no short-reeled yarn is produced for the Indian market none will be sold in the Indian market; and there will be a substantial danger that yarn short-reeled for export will be sold in the Indian market without the knowledge, and to the detriment, of the manufacturer, if there be a fundamental presumption that the seller of the yarn originally intended for export will not be held directly and primarily responsible. Therefore the two sentences pointed out above should be deleted.

Draft D, para. 5.—In the "Instructions for Guidance of Factory Inspectors" paragraph 5 of Draft D instructs the Factory Inspectors that "Complaints should as far as possible be preferred against the manufacturers of the yarn rather than the sellers." The principle of placing a burden upon the broadest back is a sound one so long as the burden is really appropriate to the back, but to impose a burden upon a particular back simply because it is broad and without having shown that it ought to bear the burden would be unjustifiable.

I therefore submit that the first sentence in this paragraph is objectionable.

I also respectfully recommend the following

Alterations.

Draft D, para. 8.—In the "Instructions for Guidance of Factory Inspectors," paragraph 8, Draft D, should, I consider, be inserted between Section 12 (1) and Section 12 (2) among the proposed addition to the M. M. Act so as to give its meaning the authority of law instead of leaving it to stand amongst a set of "Instructions" amenable to casual alterations.

Draft D, para. 2.—In the "Instructions for Guidance of Factory Inspectors" the second sentence of paragraph 2 should be placed in the first paragaph of Draft A in the proposed additions to the M. M. Act after the last word "Mill of origin," but preceded by the word "But."

The first sentence in this paragraph should go together with paragraph 1.

Draft B in the "Proposed addition to the M. M. Act."—There is a point of special importance to which I would draw attention in reference to Draft B, trusting the Government will see its way to modify or alter it as respectfully suggested here.

It was affirmed at our meetings by my colleagues that the unit of standard was a hank, *e.g.*, if any one hank in a bundle is, on being tested, found to be of an incorrect count to an extent greater or less than the described count by 5 per cent., the whole yarn is to be condemned as falsely described. But this is not clearly stated in any part of the M. M. Act to my knowledge, and neither does paragraph 3 (*a*) of Draft B express this clearly. In order to make this clear beyond doubt this paragraph should have the words "of any one hank of a bundle" inserted between the words "or number" and "is greater" in the first line.

Para. 6 *of Draft C* (Notification under Section 20) explains as to what the test of a yarn consists of, but it does *not* say that one single hank in a knot or bundle found differing from the described count by 5 per cent., one way or the other, is enough to condemn the whole yarn

in question. But I was informed by my colleagues that the law means that. If so, then I respectfully submit on behalf of the Millowners' Association that the law imposes on us the obligation of performing something which we find impossible. In India it would be altogether out of the question to turn out a single bale of yarn, every hank of which would, within a margin of 5 per cent., show the same count throughout. The mill operatives here are not skilled hands, and are not reliable in carrying out instructions. The labour question is giving us enough trouble to cope with, as it is, without the law requiring us to aggravate it with provisions which it is impossible to observe. Moreover, we are handicapped in the supply of our cotton, which is not of a uniform quality. Wrapping reports in Bombay, giving the result of variations under the best of conditions, have shown conclusively, and to my own knowledge, that a margin of 5 per cent. difference is totally inadequate, as the variations in wrapping amount to over 10 per cent. even between one spindle and another. Moreover, with the class of operatives we have to reckon with, we cannot for a single hour be sure that single or double ends will not be spun and in many cases a cop or a bobbin which holds a greater length than a hank may contain single or double yarn. The difference in such hanks from the standard test would be great, and therefore, unless the average of all the hanks of one bundle is taken, the spinner will have to answer for results which he could not control. The subject has been referred to at some length in the correspondence of the Bombay Millowners' Association with the Local Government (*vide* the Association's Report for the year 1902), and having affirmed it as my conviction that the 5 per cent. basis is impracticable, I would add that I believe it to be impossible for any mill to escape conviction under the hank tests on a 5 per cent. basis. As the intention of the Government of India is to check the practice of short-reeling and not to hamper the industry I hope that the modification I suggest may be accepted by them. I would propose as a modification, which I believe would receive general approval in this country, that the average count of a whole bundle of yarn should form the basis of a test, in which case paragraph (*a*), Draft B, should be deleted and replaced by a paragraph to the following effect:—

"The average count of the whole yarn in question is less than the prescribed count by one-quarter count in the case of yarn of counts below 16s, and one-half count in the case of all other yarn."

Paragraph 6, Draft C (Notification under Section 20), should then read as follows:—

"The test shall consist in the first instance in the measurement and ascertainment of the average count of all the hanks of one bundle selected at random, etc., etc."

If Government cannot see their way to make the average count of a whole bundle the basis of a test, then the least that they can do is to take the average count of the 10 hanks comprising a knot as the basis of test. It is sincerely hoped by the whole body of members of the Millowners' Association, however, that Government will agree to let the average of the whole bundle stand as the basis. It will be noted that in the new paragraph above proposed to replace the paragraph in Draft B (*a*) no reference is made by me to the word "greater" as referring to the margin for spinning on the fine side. With reference to this I venture to point out that in order to conform to the requirements of the new rules now formulated, those who spin for local markets would prefer, for their own safety, to err on the side of spinning finer than the required count rather than coarser, and therefore no restrictions are required against this for protecting the interest of the hand-loom weaver. But, should there be any technical objection to the proposal, I would recommend that a larger allowance should be granted on the fine side, making it permissible that the average of the whole bundle or knot should not be greater than *one* count.

Imported Yarn.

As regards the rest of the report I would only put forward the suggestion that imported yarn should be subject to the same conditions as the local product. There is reason to believe that the present customs procedure in respect of imported yarns does not prevent the importation of short-reeled yarns. There appears therefore no good reason why imported yarn found

short-reeled in the Indian market should not be subject to the rules now drafted. If it is contended that imported yarn is not favoured with the same concessions as the local product in respect of count and length, I believe that it would be preferable then to allow them similar concessions and at the same time subject them to the same restrictions, in actual practice, in order to compete on equal terms. It must be remembered, however, that the concession allowed to local yarn was permitted only as a matter of vital necessity, *i.e.*, as an essential set-off against conditions not existing elsewhere. Our yarn may be tested when and where and as often as it is deemed fit, while in actual practice the imported yarn, once it has passed the Customs, escapes all further restrictions. This, I believe, might well be remedied, and I respectfully submit the above suggestion to Government.

Conclusion.

In conclusion, I would repeat that the most important points which I desire to bring to the notice of the Government on behalf of the Association are :—

(*a*) The prevention of any undesirable or inquisitorial intervention on the part of Factory Inspectors.

(*b*) The deletion of the paragraph making spinners the aim of all prosecutions.

(*c*) The modification of the provision regarding the margin for the testing of the count of yarn on the finer side as recommended above.

(*d*) The placing of imported yarn on the same basis, in actual practice, as the local product.

(*e*) And last, but not least, that *most important point, viz.*, that the basis of a test should be the average count of a bundle, as, for reasons already given, it would be *impossible* to conform to the rule as now formulated.

SASSOON J. DAVID.

BOMBAY, 3*rd November* 1903.

P.S.—I have omitted to refer to an important point relating to the narrower margin allowed in the testing of counts below 16s in the "*alterations*" proposed by me in the rules in Draft B (*a*). I am strongly of opinion that the quarter count margin for counts below 16s is quite inadequate, as, in actual working, the difficulties in spinning coarse counts are quite as great as in the case of fine counts, and I believe it will appear a workable basis to the trade if the same margin of a half-count either way were allowed uniformly in the case of all counts even those below 16s.

SASSOON J. DAVID.

3*rd November* 1903.

Appendix R.

Improvement of Indian Cotton.

CHAMBER OF COMMERCE,

BOMBAY, 14*th October* 1903.

THE SECRETARY, MILLOWNERS' ASSOCIATION,

BOMBAY.

DEAR SIR,

I am directed by the Committee of the Chamber of Commerce to hand you herewith a copy of a Memorandum recently received from the Director of Agriculture on the subject of experiments in cotton cultivation. I am also to enclose, for favour of return when done with, a

set of the photographs referred to therein. I am informed that copies of this Memorandum and of the photographs can be obtained from the Director of Agriculture. A small charge is, the Committee understand, made for the photographs.

I am, Dear Sir,
Yours faithfully,
FREDERICK NOEL-PATON,
Secretary.

MILLOWNERS' ASSOCIATION,
BOMBAY, 14*th November* 1903.

THE SECRETARY, CHAMBER OF COMMERCE,
BOMBAY.

DEAR SIR,

I am directed by the Committee of the Bombay Millowners' Association to acknowledge the receipt of your letter of the 14th October, and to thank you for the copy of the Memorandum of the Director of Agriculture on the subject of experiments in cotton cultivation and for a set of cotton photographs, both of which are returned herewith as requested.

I am, Dear Sir,
Yours faithfully,
FREDERICK NOEL-PATON,
Secretary.

THE IMPROVEMENT OF INDIAN COTTON, 1902-03.

This agricultural problem brings prominently into view two main features :—

(*a*) That our knowledge regarding the agricultural characteristics and comparative values of indigenous varieties is by no means complete.

Indefinite knowledge regarding indigenous varieties.

(*b*) That unsuccessful efforts have been made for many years to induce the Indian cultivator to grow exotic varieties in order that finer lint would be produced.

Unsuccessful introduction of exotics.

2. In 1902 seventy-seven samples of indigenous cotton seed bearing different vernacular names were obtained from various provinces in India. These probably represent a fairly complete collection of indigenous varieties. The seed was distributed for cultivation to two farms in Madras, two in Bombay, one in the Central Provinces, one in the Punjab, and two in Bengal.

Experimental cultivation of 77 indigenous varieties at 8 centres.

3. The seventy-seven so called varieties were critically examined in the field at Poona by Professor Gammie of the College of Science. He found 87 varieties in the various plots. His classification, which is tentative, is separately printed with illustrations.

Examination of varieties in the field and their classification.

4. On the Surat Farm in company with the Superintendent of the Farm, who was keenly interested, I went very carefully over each plot. We found that in some plots the plants were true to variety, but in many plots several varieties were found. I classified the varieties according to the following types :—

Classification by Mr. Mollison.

1. Broach.
2. *Bani* or *Hinganghát* ... I. With yellow flowers. II. With white flowers.
3. *Jari* or *Varâdi* ... ... I. With yellow flowers. II. With white flowers.
4. *Jethi* or Bengal *Deshi.*
5. Red flowered.
6. *Rozi* (Gujarat perennial cotton).

5. Professor Gammie tentatively refers Nos. 1 and 4 to Gossypium herbaceum, No. 2 to Gossypium indicum, No. 3 to Gossypium neglectum and Gossypium roseum, and Nos. 5 and 6 to Gossypium arboreum.

Tentative classification by Professor Gammie.

6. In accordance with my classification we marked selected plants in each plot. These plants represented probably over 100 different forms. The seed and lint obtained from each form is shown in 115 photograph illustrations. The photographs are attached to this Note. Seed from the same plants which furnished the seed and lint for the illustrations has been sown again this year at Surat (Bombay) and Siripur (Bengal) in the order of my classification and the plants will be examined by Professor Gammie or other experienced Botanist to determine how many varieties actually exist.

Seed and lint from selected plants illustrated and the seed of the same plants again sown.

7. The chief objects aimed at in 1902-03 in growing a large number of varieties at various centres of cultivation were :—

Principal object aimed at in 1902-03.

(*a*) to get indigenous varieties identified in the field ;

(*b*) to judge of their comparative values from an agricultural point of view by seeing them grow side by side under varying conditions of soil and climate ;

(*c*) to determine how far the characters of a variety change by moving it from one district to another ;

(*d*) to provide for cross-breeding between varieties on a larger scale than was done in the previous year with a few varieties.

8. I have seen all the varieties growing in their own districts and also at the various centres of experimental cultivation, and it was manifest that the agricultural characters of any variety may be very much modified by moving it from one district to another, particularly when there is considerable change in the conditions of soil and climate. The modification referred to effected the habit of growth as well as the quality and value of the lint and the percentage of lint to seed.

Effects of varying conditions of soil and climate on indigenous varieties.

The Broach or Surat *Deshi* cotton, which with the exception of *Bani*, is the finest, long-stapled indigenous variety, produces finer lint in the Navsari District than elsewhere in Gujarat. If this variety is grown away from the influence of the genial sea-breezes of the Surat and Broach Coasts, I believe the lint deteriorates in fineness and in length of staple, but not necessarily in percentage of lint to seed or actual outturn. There may be deterioration in the lint even if the plants are healthy and well grown. The effect of acclimatization has yet to be worked out.

9. The following tabulated statement shows that the changes which have occurred under favourable conditions of growth by moving varieties to new districts in 1902-03 have been greatest in the finer stapled varieties of the Broach and *Bani* types :—

Statement exhibiting the effect of varying conditions of soil and climate.

Type.	Variety.	Grown in own district in 1901.		Grown in another district in 1902.	
		Percentage of lint to seed.	Counts of yarn for which suitable.	Precentage of lint to seed.	Counts of yarn for which suitable.
Broach Type...	Broach Deshi ...	37·50	20s	42·5	10s to 12s
	Goghàri ...	39·58	20s	41·7	10s to 12s
	Làlio (Chhàrodi) ...	31·60	30s	30·0	20s
	Wàgad ...	31·25	12s to 14s	30·0	8s to 10s
	Sakàlio ...	32·40	20s	31·5	30s
	Kànbi ...	33·15	16s	32·1	8s to 10s
Bani	Bani ...	25·7	40s	23·8	20s
Jari or Varàdi ...	Jari ...	33·30	10s	33·3	12s
	Varàdi ...	39·29	10s	36·1	10s
	Yerràpatti ...	28·96	20s	28·0	12s
Jethi ...	Jethi ...	20·6	10s	19·1	16s
Rozi ...	Nàdam ...	24·37	16s	21·8	12s to 16s

Indian cotton of Broach type.

10. Thirteen varieties of the Broach type are illustrat[ed] varieties can easily be recognized [by] characters are very similar. The plant[s] and therefore have a general prolific capacity. On alluvial soil the plan[t] pyramidical than on black soil. *Kumpta* ripens earlier than the ot[hers] take at least 8 months to come to maturity. They are best suited as dry cro[ps] holding black soil. They would without irrigation dry up in average seasons [on] in the lighter descriptions of black soil found in Kathiawar, Khandesh, Berar, a[nd] Provinces. These lands do not hold moisture after December, and irrigation, for re[ason] need not here be discussed, is out of the question. The cultivators are at present forced [to] quick-maturing varieties. These unfortunately produce cotton of inferior quality. B[ut] cotton was grown very successfully in 1902 over a considerable area in Behar, and there [the] lint did not deteriorate in the first season to the same extent as occurred in some other districts. I have extensive experiments with this and other high class cottons in progress in the current season in Behar on several indigo concerns to test their suitability for worn [out] indigo lands. The results so far are promising. It may be found that young seedlings of the Broach type will withstand the hot winds of April and May in the north of India, in which case these late-ripening varieties may prove suitable for extensive tracts under canal irrigation in the Punjab and United Provinces, where very inferior varieties are now grown. If the seed cannot be successfully sown before June the plants may in December be so affected by severe cold that growth is arrested before they come into full flower. All varieties of the Broach type did extraordinarily well at Hissar in 1902 until the December cold destroyed the flowers and foliage. It will be seen from the illustrations of lint and seed in photograph I that the Bombay varieties are superior to those of Madras, but none of the illustrations show lint as long and fine as that produced in the ordinary cultivated fields of the Navsari District, where on, account of climatic conditions, the best cotton of the Broach or Surat type is produced.

Indian varieties of the *Bani* type.

11. Thirty-eight illustrations on photographs II, III, and IV, show the lint and seed of varieties of the *Bani* type. White and yellow-flowered plants appear to be common in some varieties. It has yet to be determined whether the seed from a white-flowered plant will produce plants with white flowers. Professor Gammie reports that he has found the percentage of lint to seed in white-flowered plants in the *Bani* and *Jari* types to be higher than that from yellow-flowered plants. This is not constantly the case. My observations at present suggest that the lint from white-flowered plants, though some times dense and thick on the seed, is generally coarse and often short. The photographs illustrate the extraordinary differences in length of staple found in varieties of the *Bani* type. The "Chanda cold weather" *Bani*, yellow-flowered *Moto Mathio*, Dharwar *Nimar Gangri*, *Khonkho Ocoa*, white-flowered *Majha* and the "Cawnpore improved" varieties probably represent those of the *Bani* type which deserve special attention in aiming at improvement by selection of seed and by crossing with other indigenous varieties. The illustration of the lint and seed of *Bani* does not show such fine long fibre as that produced in the Hinganghat District, where this variety does better than elsewhere. *Bani* and the "Chanda cold-weather" variety produce in their own districts finer and longer lint than any other Indian variety. Varieties of the *Bani* type have few branches, few flowers, and are therefore not prolific. Notwithstanding these faults the value of the varieties specially mentioned in this paragraph for crossing with more vigorous growing Indian varieties will be kept fully in view. *Bani* was once extensively but is now only sparingly cultivated. The lint is known as Hinganghat cotton and has a high reputation in the trade. Such varieties as have the general characteristics of *Bani* come to maturity without exception in 5 or 6 months. They can therefore without irrigation be grown over wide areas. With few exceptions the percentage of lint to seed is small. It has been already noted that the lint of *Bani* is apt to deteriorate when this variety is moved from its own district, and, all things considered, the area under this variety is not likely to extend.

Varieties of the *Jari* or *Varadi* type.

12. Professor Gammie shows in his tentative classification that it is difficult to determine the origin of varieties classed under this type. Almost every variety can be grown successfully in every province

soil and climate and with less risk of failure and mishap than the s. They ripen in 5 or 6 months and produce lint which is generally te in colour. The percentage of lint to seed is high in most varieties The plants are usually tall with few branches and individually are not y can, however, be left much closer together than plants of the Broach wrongly included in No. 5 photograph. It belongs to the *Rozi* type. rations on photographs V, VI, VII, and VIII show that the varieties of *Rozi* type vary greatly in length of lint. The varieties which deserve most improvement by selection or by crossing with other indigenous varieties are white-flowered *Hirvan radi Hirvan*, yellow-flowered *Moto Mathio*, *Yerrapatti*, *Katil Nilayati*, yellow-flowered *Jari Lasing* *Angangba Garo Hill* and white-flowered *Deshi Hissar*.

13. Photograph IX illustrates three types. The *Jethi* variety of Bengal is very much like *Deshila* from the same province and *Deshi* from Sultanpur. Each of these varieties is extremely vigorous in growth, very much branched and very prolific. In Bengal *Jethi* takes 10 months or longer to come to maturity. The percentage of lint to seed is very low. The lint is only suitable for the low counts of yarn.

The *Jethi* type.

14. The characters of Gossypium arboreum prevail unmistakably in the red-flowered and *Rozi* types, the lint and seed of which is illustrated on photograph IX, and in *Kokonáda*, the lint and seed of which is illustrated on photograph V.

Red-flowered and *Rozi* types.

The *Dev Kapás* and "red-flowered Navasari" are very similar. Stray perennial plants of this kind are grown near temples and in gardens in many parts of India. *Rozi* is also a perennial and is an important crop in the alluvial soils of Northern Gujarat. This and the *Nadám* and *Kokonáda* varieties of Madras mature slowly. *Bogarh Siáh* ripens quickly. All are tall, well-branched, fairly fruitful plants. *Kokonáda* has drab or light khakhi lint.

15. The list of indigenous varieties as referred to in the previous paragraphs may not be complete for the whole of India. I feel certain, however, that no variety which is of special commercial importance is excluded. In the current season the various provinces will be exploited for varieties which are not included in my list. For the purpose of studying the characteristics of each indigenous variety and noting the effect of acclimatization, all varieties will be grown in small plots at several centres for some years. It is, however, necessary to get away from the experimental plot to the cultivator's field with as little delay as possible. With this object in view and for the purpose of the improvement of varieties by selection of seed and cross-breeding, many varieties can at once be discarded. This is especially the case of those grouped under the *Bani* and *Jari* types. At all the centres of experimental cultivation some varieties were very far ahead of others in vigour of growth, prolificness and in quality and colour of lint. The information obtained has been applied in a practical way on some of the Government Farms in the current season.

Scope of experiments in the current season.

16. I am strongly of opinion that nearly every indigenous Indian variety has degenerated. This is, I believe, not due to exhausted soil and inferior cultivation only. Some of the most degenerate forms are found in general cultivation in the rich alluvial soils of the Indo-Gangetic Plains. The Broach and Surat Districts in the Bombay Presidency produce cotton which in almost every field is particularly true to variety. The advent of ginning factories has not tended to deteriorate quality or introduce admixture of variety in these districts. The reasons are easily determined. The deep black soil is naturally very fertile and this natural fertility is maintained at rather a high standard, at any rate in the Broach District, by a system of bare-fallowing which is very common. The holdings are large and considerable proportion of each is bare-fallowed in the most thorough way every year. Cotton is grown in this area in the following year. The seed

It is probable that every indigenous variety has degenerated.

is drilled in accurately straight equidistant rows. Seed is cheap and is not spared. The seedlings come up thick and are thinned out by hand. Those which are not true to variety are removed and ultimately the strong and healthiest seedlings are left in the rows at least 18 inches apart. This is a natural process of selection which has gone on for many years. The practical result is that the length and quality of lint is better than in the same type of cotton grown in other districts. The varieties of the Broach type of Madras are very closely allied to those of Bombay. The Madras plants are less vigorous, less productive, and are left much closer together in the rows. The percentage of seed to lint in a good crop of Broach Deshi varies from about 35 to 40 per cent. It varies in the varieties of the same type as grown in Madras from about 20 to 25 per cent. The continued use of the same strain of unselected seed for many generations has, I feel sure, been largely responsible for the marked deterioration of the Madras cotton of the Broach type.

Length, quality and percentage of lint improved by superior cultivation and selection of seed.

17. Our experiments have proved that the length and quality of lint and percentage of lint to seed are favourably affected by superior conditions of cultivation and by selection of seed from the most prolific plants continued from year to year. There may be misgivings, therefore, regarding the good that may follow the distribution of improved seed in the older cotton districts of India, particularly in Madras, Berars and Central Provinces, because impoverished soil will not produce healthy vigorous plants and the quality of the cotton will rapidly deteriorate unless more liberal methods of cultivation and careful selection of seed are adopted by the cultivators. There is decided hope that such distribution among cultivators of lands commanded by cheap canal irrigation in the north of India will result in more extensive cultivation of cotton of a better class than that now produced.

Expert valuation of indigenous cottons grown at various farms in 1902-03.

18. I submitted to Mr. J. N. Tata of Bombay samples of lint of indigenous varieties grown in 1902-03 at various farms. In the following tabulated statement the percentage of lint to seed in each variety is noted, also the province where the seed was originally obtained and the place where ground in 1902-03. Four of Mr. Tata's cotton experts, (Messrs. Maneckjee Merwanjee, Jeejeebhoy Ardesher Divecha, P. S. Lalcaca, and Jamnadas Muljee) have valued the samples and estimated the counts for which each sample is suitable and this is incorporated in the following tabulated statements:—

Statements showing indigenous varieties of cotton grown at various Farms, their percentage of lint to seed, expert estimate regarding value, quality and counts for which each is suitable.

Serial No.	Type.	Name of variety.	Native of	Where grown.	Percentage of lint.	Estimated value on 2nd July 1903. Per Bombay Candy.	Counts of yarn for which suitable.	REMARKS.
						Rs.		
1		Kumpta ...	Bombay Presidency.	Bombay Farms.	24·4	220—5	20 s	Fine class. Fair staple. Colour slightly reddish, slightly inferior in length of fibre to Kumptas grown in the district.
2		Ghogari ...	„ ...	„	41·7	215	10 s—12 s	Superfine class. Short staple, equal to Dhamangaon.
3		Broach Deshi ...	„ ...	„	42·5	„	„	Same as No. 2.
4		„ „ ...	„ ...	Arrowah, Bengal.	33·2	240	20 s—24 s	Fine class. Good staple.
5		Lalio-Chharodi...	„ ...	Bombay Farms.	33 3	255—60	30 s	Superfine class. Good in staple.
6		„ „ ...	„ ...	Bellary Farm.	30·0	230—5	„	Barely fine class. Strained. Good staple.
7		Lallo-Kathiawar.	„ ...	Bombay Farms.	34·3	245—50	30 s	Superfine class. Good staple.
8		Wagad ...	„ ...	„	36·3	225—30	12 s—16 s	Fine class. Medium staple, equal to Yeotmal.
9		„ ...	„ ...	Bellary Farm.	30·0	185—90	8 s—10 s	Dull colour, short staple, equal to Bengal.

Serial No.	Type.	Name of variety.	Native of	Where grown.	Percentage of lint.	Estimated value of 2nd July 1903. Per Bombay Candy.	Counts of yarn for which suitable.	REMARKS.
10	Broach Type.—(*Contd.*)	Sakalio ...	Bombay Presidency.	Bombay Farms.	31·5	260	30 s	Superfine class. Good staple. Very near Surat.
11		Kanbi ...	„ ...	„	33·3	210	10 s—12 s	Fine colour. Short staple.
12		„ ...	„ ...	Bellary Farm.	31·2	185	8 s—10 s	Dull colour. Short staple.
13		Jowari Hathi (black seeded).	Madras Presidency.	„	21·9	220	20 s	Good class. Good staple, equal to Westerns.
14		„ „ (white seeded).	„ ...	„	24·1	200—5	12 s—16 s	Good class. Medium staple.
15		Mungari ...	„ ...	„	25·7	200—5	12 s—16 s	Good class. Medium staple. Very near Westerns.
16		Uppam ...	„ ...	Bombay Farms.	30·0	205—10	12 s	Fine class. Short staple.
17		Northerns ...	„ ...	„	24·0	220	16 s—20 s	Good class. Good staple.
18		Karangánny ...	„ ...	Madras Farms.	26·1	220—5	20 s	Fine class. Good staple.
19		Kupum ...	„ ...	Bellary Farm.	29·6	215—20	20 s	Fine class. Good staple, but rather dull in colour.
20		Prodattur ...	„ ...	„	18·9	215	20 s	Good class. Good staple. Fully equal to Westerns; rather seedy.
21		Mathio ...	Bombay Presidency.	Hissar Farm.	28·9	210	16 s	Fine class. Fair staple, but shorter than Bhownagar grown in the districts; course in feel.
22		Moto Mathio ...	„ ...	„	30·0	225—30	20 s	Superfine class. Good staple.
23	Bani Type.	Bani ...	Central Provinces.	Bombay Farms.	25·0	245—50	40 s	Fine class. Good staple. Silky.
24		„ ...	„	Bellary Farm.	23·8	215	20 s	Fully good class. Fair staple. Much deteriorated: rather too soft and weak.
25		Dharwar Nimar...	„ ...	Hissar Farm.	28·0	220—5	20 s	Fine class. Good staple.
26		Khonkho Ocao ...	Assam ...	„	31·0	225	16 s—20 s	Fine class. Good staple.
27		Gangari ...	Central Provinces.	„	30·0	210	12 s—16 s	Same as Mathio.
28		Haldia ...	Bengal ...	„	20·0	220	16 s	Fine class. Good staple.
29		Lahore Deshi ...	Punjab ...	„	31·4	195	10 s	Fine class. Short staple.

Serial No.	Type.	Nature of Variety.	Native of	Where grown.	Percentage of lint.	Estimated value of No. 30-36 on 2nd July, No. 37-67 on 4th July 1903. Per Bombay Candy.	Counts of yarn for which suitable.	REMARKS.
						Rs.		
30	Bani Type.—(*Contd.*)	Deshi Lyallpur...	Punjab ...	Hissar Farm.	28·9	195	10 s	Fine class. Short staple.
31		Ludhiana Deshi.	„	„	30	195—200	„	Same as above.
32		Hissar Deshi ...	„	„	31·2	195	„	Do.
33		Narm Tribai Dera Ghazi Khan.	„	„	29·2	195	„	Do.
34		Deshi Rawalpindi.	„	„	27·3	195—200	„	Do.
35		Sathra Multan...	„	„	26·7	195	„	Do.
36		Cawnpore Improved.	United Provinces.	„	28·4	210—5	16 s	Equal to Berars.

N.B.—These samples of Broach and *Bani* types have, according to the places in which they have been grown, either deteriorated or improved in staple. This can be seen from the valuations in above statement, and from the counts of yarn for which each is assigned to be suitable. Care has been taken to estimate the above rates comparatively on the basis of rates ruling on the day of inspection in the market for cotton similar in quality.

Serial No.	Type.	Nature of Variety.	Native of	Where grown.	Percentage of lint.	Estimated value of No. 30-36 on 2nd July, No. 37-67 on 4th July 1903. Per Bombay Candy.	Counts of yarn for which suitable.	REMARKS.
37	Jari or Varádi Type.	Varádi ...	Bombay Presidency.	Bombay Farms.	36·1	195	10 s	Fine class. Short staple; same as Bengal.
38		Moto Mathio (white flower).	Do. ...	Do. ...	32·4	190—5	,,	Do. do.
39		Tifina ...	Central Provinces.	Hissar Farm.	30·5	195	,,	Do. do.
40		Kátil Viláyati ...	Do. ...	Do. ...	32·7	200	12 s	Same as above, but a little better in staple.
41		Jari ...	Do. ...	Do. ...	33·3	200	,,	Do. do.
42		Won ...	Do. ...	Bombay Farms.	26·3	200	,,	Do. do. feel soft and silky.
43		Yerrápatti ...	Madras ...	Hissar Farm.	28·0	210	,,	Fine class. Fair staple. Resembling Tinny.
44		Do. ...	Do. ...	Bellary Farm.	27·8	205—10	16 s	Fully good. Fair staple.
45		Khonkho Chickao.	Assam ...	Hissar Farm.	34·3	195—200	10 s	Fine class. Short staple.
46		Lásing Angangba	Do. ...	Do ...	27·0	220	20 s	Good class. Good staple. Good for dyeing.
47		Soru ...	Do. ...	Bombay Farms.	40·7	200—5	8 s—10 s	Very coarse in feel. Superfine class. Short staple, woolly.
48		Khumma ...	Do. ...	Hissar Farm.	38·0	195—200	10 s—12 s	High class. Fair staple.
49		Bur ...	Do. ...	Bombay Farms.	41·3	200—5	8 s—10 s	Same as Soru.
50		Kil ...	Do. ...	Hissar Farm.	38·1	200	10 s—12 s	Fine class. Fair staple.
51		Khunsa ...	Do. ...	Do. ...	36·7	200	,,	Very near Kil.
52		Bhung ...	Do. ...	Bombay Farms.	41·1	200—5	8 s	Same as Soru.
53		Bhogila ...	Bengal Presidency.	Hissar Farm.	25·6	190—5	8 s—10 s	Fine class. Short staple.
54		Do. ...	Do. ...	Arrowah, Bengal.	28·0	210	12 s	Barely fine class. Medium staple.
55		Bhurila ...	Do. ...	Hissar Farm.	27·5	200	10 s	Fine class. Fair staple.
56		Bunwála ...	Do. ...	Do. ...	21·2	190	,,	Fully good class. Short staple.
57		Braisa ...	Do. ...	Do. ...	24·8	210—5	12 s—16 s	Fine class. Fair staple, silky, feeling soft.
58		Wootha ...	Do. ...	Do. ...	24·0	190	10 s	Fine class. Short staple.
59		Kokáti ...	Do. ...	Bombay Farms.	14·6	180—5	8 s—10 s	Fully good class. Short staple.
60		Khádir Delhi ...	Punjab ...	Hissar Farm.	31·6	200	10 s	Superfine class. Short staple. Feeling rough.
61		Umballa Deshi...	Do. ...	Do. ...	33·3	200	,,	Superfine class. Same as Khadir Delhi.
62		Abaspur Deshi ...	United Provinces.	Do. ...	32·5	190—5	8 s—10 s	Fine class. Short staple.
63		Meerut Deshi ...	Do. ...	Do. ...	33·8	200	10 s	Same as Khadir Delhi. Superfine class.
64		Barkley; Ralli Brothers.	Punjab ...	Do. ...	30·0	200	,,	Do. do.

N.B.—These samples are nearly all short-staples and have the characteristics of *Jari* variety. Some varieties have not improved by being grown away from their own districts.

Serial No.	Type.	Name of variety.	Native of	Where grown.	Percentage of lint.	Estimated value on 4th July 1903. Per Bombay Candy.	Counts of yarn for which suitable.	Remarks.
						Rs.		
65	Jethi.	Deshila ...	Bengal Presidency.	Bombay Farms	16·4	205— 10	10 s—12 s	Resembling Tinnevelly, but shorter in staple comparatively.
66	Jethi.	Jethi ...	Do. ...	Do. ...	19·1	220	16 s	Superfine class. Medium staple.
67	Jethi.	Do. ...	Do. ...	Arrowah, Bengal.	19·9	195	10 s	Fully good class. Short staple.
68	Red flowered.	Bagar Safed ...	Punjab ...	Hissar Farm.	31·4	195	10 s	Fine class. Short staple.
69	Rozi.	Nadam ...	Madras ...	Bombay Farms.	21·8	200—5	12 s—16 s	Superfine class. Fair staple.
70	Rozi.	Kokonada ...	Do. ...	Kirkee Farm.	24·0	220—5	16 s—20 s	Good class. Good staple.

Brief review of efforts made to introduce exotic varieties and their results.

19. Persistent efforts have been made for many years to introduce exotic varieties of cotton into general cultivation in various parts of India. An acclimatized American variety has been grown for over thirty years in the Dharwar District. At one time the cultivation was extensive. The area has declined of late years. The indigenous *Kumpta* is gaining ground, whereas the cultivation of the exotic is gradually declining. In many fields the *Kumpta* and exotic varieties are grown mixed. In one district (Erode) of Madras cotton of American type and locally known as " Bourbon " cotton occupies a few thousand acres, but here again the crop is not grown unmixed. " Upland Georgian " type have been thoroughly acclimatized on the Nagpur Farm and in many fields in the Central Provinces a stray plant here and there can be seen, but there is no general cultivation. Several American varieties of the " Upland " type have been more or less acclimatized at the Cawnpore Farm and they have been recommended for more general cultivation, but so far with no particular success. Native cultivators have not taken kindly to the exotic varieties, because they are, even when acclimatised, more risky to grow than ordinary indigenous varieties, being very susceptible to mishaps due to insect attack, heavy down-pours of rain and such like. The acclimatization of exotics in India, moreover, causes general deterioration, so that in time the lint is not so valuable as that obtained from the finer indigenous varieties. The effects of acclimatization and of unfavourable conditions of soil and climate have altered the characters of exotic cottons in other ways. In particular, deterioration has occurred in size of bolls, in size of seeds, in percentage of lint to seed and of oil in the seed.

Cultivation of exotic and indigenous varieties under same conditions.

20. In 1902-03 at each of the Farms exotics were grown under precisely the same conditions of cultivation as the indigenous varieties. The exotics included 2 " Upland " varieties, one of which had been acclimatized for a number of years in the Dharwar District, Bombay, and the other on the Nagpur Farm, Central Provinces, 5 " Upland " varieties which had been acclimatized at the Cawnpore Farm for a few years, 2 Egyptian varieties which had been introduced by Mr. Tata and acclimatized for two years, and 27 well-known American varieties which I introduced specially for the purpose of these experiments.

Failures and successes with exotics.

21. The recently introduced American and Egyptian varieties have done badly on black soil everywhere. The plants got blighted and the leaves curled up and dried. A miserable plant, here and there, produced a boll or two. The American varieties, with irrigation, acquired a new

lease of life in the fair season at Nagpur and Poona and then showed a healthier appearance of growth. The acclimatized "Upland" varieties did badly on black soil when transferred from their own districts. 27 newly introduced and 5 acclimatized American varieties did surprisingly well at Hisaar on deep rich alluvial soil helped by irrigation. All exotics there came to maturity, on an average, as soon as the early ripening indigenous varieties. They did not therefore suffer from frost. Two acclimatized American varieties were sown extensively by Mr. MacGregor at Arrowah, Saran, Bengal. The crops were damaged by cold in December, but revived afterwards and yielded well.

Expert valuation of 7 acclimatized American varieties grown on the Farms in 1902-03.

22. I submitted to Mr. Tata for professional opinion and valuation samples of the lint of 7 acclimatized American varieties grown on the farms in 1902-03. In the following statement information regarding the place where grown and the percentage of lint to seed is incorporated with Mr. Tata's report. His experts state that most of these acclimatized exotics appear to have deteriorated, and that values have been determined on the basis of rates ruling in the market on the date of inspection for qualities of Indian cotton resembling them in colour and staple.

Statement showing seven acclimatized American varieties of cotton grown at various places, their percentage of lint to seed, expert estimate regarding value, quality and counts for which each is suitable.

Serial No.	Name of variety.	Place where acclimatized.	Place where grown.	Percentage of lint to seed.	Estimated value per Bombay Candy.	Counts of yarn for which suitable.	Remarks.
					Rs.		
1	Sawginned Dharwar crop of 1902.	Dharwar (Bombay.).	Hissar (Punjab).	29·7	190	10 s	Equal to fine Bengal. Short in staple, but feeling very soft.
1	Sawginned Dharwar crop of 1901.	Do ...	Poona (Bombay).	33·5	225	20 s—24 s	
2	Upland Georgian.	Nagpur (Central Provinces).	Nagpur, (Central Provinces).	29·7	250	30 s	Equal to Surat.
3	Upland Georgian, No. 1 variety.	Cawnpore (United Provinces).	Hissar (Punjab).	29·2	225—230	20 s	Fine class. Staple good.
4	Upland Georgian, No. 2 variety.	Do. ...	Do. ...	29·5	260—265	30 s	Equal to Bani Hinganghat. Good long staple. Silky.
5	Upland Georgian, No. 3 variety.	Do. ...	Do. ...	29·7	255	24 s	A bit inferior to last.
6	Ralli Brothers' seed.	Unknown ...	Arrowah(Bengal.)	33·3	200—205	12 s—14 s	Fully good crop. Medium staple.
7	Khaki Lyallpur (Nankin cotton).	Lyallpur (Punjab).	Hissar ...	24·1	220	20 s	Good for warp. Medium stapled. Good for dyeing only.

Expert valuation of 27 newly introduced and 3 acclimatized American varieties of cotton grown on Hissar Farm.

23. Samples of seed and lint of 27 newly introduced and three acclimatized American varieties are illustrated in photographs X and XI. All were grown on the Hissar Farm. The lint produced in the first year from the newly introduced varieties is in many cases inferior in quality and much shorter than the produce of the same varieties as grown in America. A few varieties have, however, produced lint which is long, silky, pure in colour, and commercially very valuable. The seed of each variety is much larger than that of acclimatized American or any indigenous variety. On this account the lint could not be separated in the ordinary pattern of country hand-gin. I submitted the samples to Mr. Tata for professional opinion and valuation. I add to his experts' report the percentage of lint to seed found in each variety. The details are tabulated below :—

Statement showing 27 newly introduced American varieties of cotton grown on Hissar Farm, their percentage of lint to seed, expert estimate regarding value, quality and counts for which each is suitable.

Serial No.	Name of variety.	Percentage of lint.	Estimated value on 1st July 1903. Per Bombay Candy.	Count of yarn for which suitable.	Remarks.
			Rs.		
1	Russel	37·5	270—75	40 s	Creamy white. Fine class. Good long staple, strong fibre; better than Navsari.
2	Truit	31·1	.....	.....	Same as above, but a little better in appearance, being cleaner.
3	Mattis	32·38	.....	.....	Feel a bit coarse, but whiter in colour than Nos. 1 & 2, same as above.
4	Christopher	32·25	.....	.....	In all respects same as No. 2.
5	Chiese	31·3	.....	.....	„ „ „ 4.
6	Whittle	31·25	.....	.....	„ „ „ 5.
7	W. A. Cook	30·77	350	60 s	Superior to the above six in every respect.
8	Boyd Prolific	31·1	270—5	40 s	Same as No. 2.
9	Roby Prolific	32·6	250	30 s	Inferior to all the above 8, being somewhat shorter in staple and weaker in fibre.
10	Texas Big Boll ...	30·0	325—30	60 s	Almost equal to No. 7, but a bit shorter in staple.
11	Herndon	31·6	270—5	40 s	Same as No. 2.
12	Jackson Limbles ...	33·3	250	30 s	Equal to fine Broach.
13	Cameron	30·0	260—5	40 s	A little longer in staple than No. 12. Equal to Surat.
14	Dearing	31·4	265—70	40 s	Better than No. 13, being a bit whiter in colour and longer in staple.
15	Mathews Long Staple...	35·0	260—5	40 s	Equal to No. 13.
16	Texas Burr	30·9	.....	.....	Same as No. 15.
17	Gondola	33·3	270—5	40 s	Same as Nos. 1 and 2.
18	Texas Long Staple ...	31·1	280	50 s	A bit superior to No. 17.
19	Culpepper	31·7	270—5	40 s	Same as Nos. 1 and 2.
20	Wise	34·3	.....	.....	
21	Braddy	34·3	260—5	40 s	Same as Surat.
22	King's Improved ...	32·6	250	30 s	Equal to Broach.
23	Doughty	29·4	400	80 s	Very good, even better than No. 7.
24	Griffin	25·0	.....	.....	Equal to No. 23.
25	Kemper County ...	31·6	270—5	40 s	Same as Nos. 1 and 2.
26	Smith's Improved . .	31·4	260—5	40 s	Same as Surat. A bit shorter in staple than No. 25.
27	Dickens	31·3	.....	.....	Same as No. 26.

Surat cotton as basis for comparison.

24. Mr. Tata's experts in a foot-note state that most of these American exotics have retained their characteristics both in colour and staple, but not in feel. Some, however, have preserved *all* their characteristics. In estimating the values the price of Surat cotton ruling in the market on the day of

inspection was taken as the basis of comparison. The prices of Americans ruling on the particular day were not considered, because owing to wild speculation fluctuations from day to day have been irregular and wide.

Expert valuation of Egyptian cottons grown on the Nagpur Farm in 1901-02 and 1902-03.

25. Samples of Egyptian cotton grown on the Nagpur Farm in 1901-02 and 1902-03 were submitted to Mr. Tata. His experts' valuation and other information are tabulated below :—

Name of variety.	Percentage of lint to seed.	Count for which suitable.	Estimated value per Bombay Candy.
			Rs.
Abassi 1901-02 crop	35	100 s.	408
Do. 1902-03 crop	27·8	60 s.	325
Metafifi 1901-02 crop	35	50 s.	325

Dry Indo-Gangetic Plains more suitable for exotics than the black soil.

26. It may be deduced from the previous paragraphs that an attempt to introduce exotic varieties of cotton on the black-soil areas of Madras, Bombay, Berars, and Central Provinces is not likely to be successful. At this stage, however, I do not think that the experiments should be definitely given up. At the same time I am convinced that real improvement of cotton in these black-soil tracts can only be obtained by improving indigenous varieties. I am, however, more sanguine regarding the adaptability of exotic varieties for the drier portions of the Indo-Gangetic Plain, where, as in Behar, the rainfall is moderate and normally well distributed, or where, as in wide areas in the United Provinces, Punjab and Sind, a deficient rainfall is supplemented by cheap canal irrigation. Deep alluvial soil which has good natural drainage is much better suited for exotic cottons than "black-cotton soil."

Possibility of arresting deterioration in exotics.

27. If it is an established fact, as I believe, that exotics gradually deteriorate in this country, and it is proved that certain exotic varieties are suitable for general cultivation in the north of India or any other tract, the deterioration can probably be arrested and possible improvement effected in acclimatized varieties by cross-fertilization. The "Upland" varieties of Nagpur and Dharwar were crossed in 1902-03 with newly imported American varieties. This line of experiment will be elaborated in the current season.

Cross-fertilization Experiments at Poona and Surat.

28. In November 1901, on the Poona and Surat Farms I began experiments in cross-breeding with a few indigenous varieties. The results which have been obtained prove that new vigorous varieties can be produced by artificial cross-fertilization. At Poona we dealt with the following varieties :—Broach *Deshi*, *Goghári*, *Kumpta*, Dharwar American, *varádi* of Khandesh and *Kálț* of Assam ; at Surat with Broach *Deshi*, *Goghári*, *Varádi* of Khandesh and *Jari* of the Central Provinces. The manipulation necessary for artificial cross-fertilization is very simple, as the flowers of cotton are large. A *Mali* or native fieldworker of ordinary intelligence having deft fingers can be taught to do the work in a very little time. It is, however, desirable to have the work done by agricultural apprentices or trained fieldmen who are fairly educated.

Encouraging results obtained.

29. Professor Gammie, in an illustrated Note which is separately printed, has very carefully worked out the botanical characters of the crosses obtained at Poona. He has watched and to a considerable extent guided the experimental work there from the start. I submitted to Mr. J. N. Tata for professional opinion and valuation samples of lint obtained from the most prolific and promising of the Poona crosses. The report is appended to Professor Gammie's Note. It shows that some of the Poona crosses have produced lint of exceptional quality.

Crosses between varieties of Broach type.

30. In crossing varieties of the Broach type *inter se* no particularly noticeable alteration of characters was observable excepting—

(*a*) that increased vigour of growth was shown;

(*b*) that the earlier maturity and numerous flowers of the *Kumpta* variety were clearly present in the crosses between this variety and Broach *Deshi* and *Goghâri*;

(*c*) that plants grown from the seed of a single cross-fertilized boll were variable in productiveness, some being very productive, a few being nearly barren;

(*d*) that the percentage of lint to seed was low when the *Kumpta* variety was one parent. The lint of these crosses was, however, finer than that of those between *Goghâri* and Broach *Deshi* varieties.

Crosses between certain types gave unsatisfactory results.

31. The crosses obtained at Poona and Surat between varieties of the *Jari* type (*Varâdi*, Nagpur *Garo Hill*, and *Jari* varieties) were not, in my opinion, of any practical value. The plants were not productive and the lint no better than that of either parent. The crosses obtained from Dharwar American as one parent were likewise unsatisfactory.

Very satisfactory results obtained by crossing varieties of the Broach and Jari types.

32. The crosses got from varieties of the Broach and *Jari* types were more interesting and more instructive. It has been established that the first effect is great variation. The plants produced from seed of a single boll showed in some cases considerable variation. Some plants had promising characteristics, whilst others, similarly bred, grew chiefly to wood and leaves with little fruitfulness. In almost every instance increased vigour of growth was clearly exhibited. The cross between the Broach type as male and the *Jari* type as female parent was characteristically different from the cross between the Broach type as female parent and *Jari* type as male. The outstanding and most valuable results from an agricultural point of view are—

(*a*) that selected crosses mature nearly as quickly as inferior varieties of the *Jari* type;

(*b*) that for this reason they may be found suitable for districts where the normal character of the season has hitherto been only suitable for inferior quick ripening varieties;

(*c*) that they inherit a good deal of the branching habit of growth and productiveness of varieties of the Broach type;

(*d*) that in those crosses specially selected for future cultivation the percentage of lint to seed is quite satisfactory and the quality of the lint is superior to that of any variety of Broach type, and of course very much superior to any variety of *Jari* type.

Surat crosses superior to Poona crosses.

33. I believe that the most promising crosses which were grown at the Surat Farm produced lint which was finer and commercially more valuable than that produced by the best plant at Poona. In some measure I attribute this to the proximity of Surat to the sea ameliorating influence of soft sea-breezes.

The opinion of Mr. Tata's experts on the lint of Surat crosses.

34. Small samples of the lint obtained from the Surat crosses which are illustrated in photographs XII, XIII and XIV were sent to Mr. Tata for professional opinion and valuation. Each sample was collected from a single plant. His cotton experts report as follows;—

"*Report on samples of lint from cross-bred cotton plants grown on the Surat Government Farm in* 1902-03."

"1. Nagpur (*Jari*)+Broach *Deshi*=16 samples: all are nearly alike in colour and staple except Nos. 2 and 10, which are silky and better in staple than the rest. These crosses show much improvement in staple, if by Nagpur is meant the *Fari* cotton of the Nagpur District.

"It is very difficult to estimate values from such small samples, which are all clean. However, they may be estimated at about the price of Broach, while Nos. 2 and 10 at about the price of Navasari.

"2. Broach *Deshi*+Nagpur (*Jari*)= 18 samples. Of these Nos. 5, 6, 8, 15, 16 and 17 are superior in length of staple to the others. Same remarks apply to these as to No. 1 crosses. The superior class may be estimated at Rs. 280 per candy and the ordinary at Rs. 250 per candy.

"3. *Goghári*+Nagpur (*Jari*)= 18 samples. Of these one, No. 9*a*, is the best of the lot. Nos. 1, 3, 4, 5, 7, 8, 9, 12, and 13 are better than the rest. The lint is in no way deteriorated by Nagpur *Jari* cross. Value about the price of Surat for the superior ones and of Broach for the rest. It is very difficult to ascertain value of sample No. 9*a*, it being so very small."

1902-03 experiments were more elaborate than those of previous year. Plans for future work.

35. In 1902-03 the experiments in cross-breeding were more comprehensive than in the first season. The 1903-04 results will not be known until the crossed crops ripen in the current season. The best types of late and early ripening indigenous varieties have been crossed and the values of exotics for cross-fertilization purposes has been kept in view. I recommend that no attempt be made to extend cultivation beyond small Demonstration Farms until it is absolutely proved that superior varieties which can be grown without risk have been produced. We need practical fieldmen in every Province to conscientiously supervise the work and more men of Professor Gammie's experience in each Province to direct it. Its success will depend upon such provision being made. When we have made headway to this extent, the establishment of seed farms in every cotton-growing district will have to be dealt with. Meantime, I believe, we are on "the right rails" and there are hopeful signs that the improvement of Indian cotton is easily possible by *working from within*.

Acknowledging excellent work.

36. I have to acknowledge the excellent work done by Professor Gammie and by Mr. Kelkar and Mr. Kulkarni, the Superintendents of the Poona and Surat Farms. The Bombay Presidency is a year ahead of other Provinces in the improvement of cotton by cross-fertilization. The work has, however, been enthusiastically taken up in other Provinces.

NAGPUR:
15*th August* 1903.

J. W. MOLLISON,
Inspector-General of Agriculture in India.

Appendix S.

Proposed Official Registration of Trade Marks.

No. 7310 OF 1903.

REVENUE DEPARTMENT,
BOMBAY CASTLE, 17*th October* 1903.

THE SECRETARY, MILLOWNERS' ASSOCIATION,
BOMBAY.

SIR,

I am directed to forward copy of a letter No. 5971-S.P., dated 29th September 1903, from the Government of India and of its accompaniments on the subject of the registration of Trade Marks in India, and to request that you will be so good as to favour Government with the opinion of the Association on it.

I have, &c.,
G. T. KEATINGE,
Under-Secretary to Government.

No. 5971-S.R.

GOVERNMENT OF INDIA.

FINANCE AND COMMERCE DEPARTMENT.

STATISTICS AND COMMERCE.

Customs.

FROM

J. CAMPBELL, ESQ.,

Offg. Under-Secretary to the Government of India,

To

THE SECRETARY TO THE GOVERNMENT OF MADRAS,
REVENUE DEPARTMENT.

„ CHIEF SECRETARY TO THE GOVERNMENT OF BOMBAY,
REVENUE DEPARTMENT.

„ SECRETARY TO THE GOVERNMENT OF BENGAL,
FINANCIAL DEPARTMENT.

„ REVENUE SECRETARY TO THE GOVERNMENT OF BURMA.

„ SECY. TO THE GOVT. OF THE UNITED PROVINCES,
FINANCIAL DEPARTMENT.

Simla, the 29th September 1903.

SIR,

I am directed to invite attention to your letter No. 626 / 5263 / 3417 / 81—5-C., dated the 14th July / 4th August / 25th July / 7th August 1891, and to forward a copy of the correspondence noted in the margin, regarding the registration of trade marks in India.

I am directed.

1. From the Secretary of State for India, No. 115, Revenue, dated the 7th August 1903, and enclosures.
2. From the Secretary, Revenue and Statistics Department, India Office, No. R & S. 1874, dated the 7th August 1903 and enclosures.

2. In 1877 the Millowners' Association and the Chamber of Commerce, Bombay, suggested the introduction into the Imperial Legislative Council of a Bill to provide for the registration of trade marks in India. A Bill giving effect to this suggestion was introduced; but it was subsequently withdrawn on the recommendation of the Association and the Chamber of Commerce, who, upon reconsideration, were of opinion that it was inadvisable to legislate. The question was also raised in the years 1884 and 1888; but, after enquiry, it was decided that no action should be taken.

In 1891 the suggestion was again made; after consulting the Local Governments and the Chambers of Commerce interested in the proposal, the Government of India decided that it would be inexpedient to introduce any system for the registration of trade marks, as the mercantile community generally was opposed to such a measure. This opposition was apparently based upon the belief that the provisions of the existing law, as embodied in the Indian Penal Code, the Sea Customs Act, and the Merchandise Marks Act, were sufficiently comprehensive to afford protection to the legitimate users of trade marks. It is now urged, on behalf of certain English manufacturers, that legislation should be resorted to for the better protection of trade marks; and that this legislation should follow generally the lines of the English enactment. I am to request that the Government of India may be favoured with the opinion of His Excellency the Governor in Council / His Honor the Lieutenant-Governor on this proposal, together with that of the Madras Chamber / Bombay and Karachi Chamoers / Bengal Chamber / Rangoon Chamber / Upper India Chamber of Commerce, and of such other Commercial Associations, if any, as it may be considered advisable to consult.

I have the honour to be,
Sir,
Your most obedient servant,
J. CAMPBELL,
Offg. Under-Secy. to the Govt. of India.

GOVERNMENT OF INDIA.
FINANCE AND COMMERCE DEPARTMENT.
STATISTICS AND COMMERCE.
Customs.

To

THE SECRETARY TO THE GOVERNMENT OF MADRAS, REVENUE DEPARTMENT.
„ CHIEF SECRETARY TO THE GOVERNMENT OF BOMBAY, REVENUE DEPARTMENT.
„ SECRETARY TO THE GOVERNMENT OF BENGAL, FINANCIAL DEPARTMENT.
„ REVENUE SECRETARY TO THE GOVERNMENT OF BURMA.
„ SECRETARY TO THE GOVERNMENT OF THE UNITED PROVINCES, FINANCIAL DEPARTMENT.

No. 5971-S.R.

Dated Simla, 29th September 1903.

Forwards a copy of correspondence regarding the registration of trade marks in India and asks for the opinion of His Excellency the Governor in Council and His Honour the Lieutenant-Governor together with that of the mercantile community through their respective Chambers of Commerce and other Commercial Associations.

GOVERNMENT OF INDIA.
FINANCE AND COMMERCE DEPARTMENT.

ENCLOSURES TO LETTER No. 5971-S.R. OF 1903.

No. 115-Revenue, dated 7th August 1903.

From—His Majesty's Secretary of State for India,

To—His Excellency the Right Honourable the Governor-General of India in Council.

With reference to your letters No. 106 (Finance), dated 17th April 1902, and No. 24 (Revenue), dated 15th May 1902, on the subject of the registration of trade marks in India, I forward, for the consideration of your Government, a copy of a communication* received from the Cutlers' Company, Sheffield, urging that legislation should be undertaken in India for the registration of trade marks and a copy of correspondence between this Office and the Board of Trade relative to the proposal.

* Letter from the Cutlers' Company, dated 8th July 1903, and memorandum.
Letter to Cutlers' Company, R. and S. 2023, dated 11th September 1902.
Letter to Board of Trade, R. and S. 2023, dated 11th September 1902.
Letter from Board of Trade, F. 12451, dated 20th July 1903, with two enclosures.

2. Should you decide to refer the matter for opinion to Local Governments and Chambers of Commerce in India, I shall be glad to learn in due course the result of the reference and your conclusions thereon.

ENCLOSURES.

Enclosure No. 1.

Dated 8th July 1902.

From—MR. HERBERT HUGHES, Law Clerk to the Cutlers' Company of Sheffield,

To—The Under-Secretary of State for India, India Office.

I am directed by the Cutlers' Company to ask for Your Lordship's consideration of the accompanying memorandum with regard to the registration of trade marks in India, and to express the hope that Your Lordship will take such action as may be necessary to establish in so important a commercial outlet of the United Kingdom as India, a state of things, with regard to the law of trade marks, more in harmony with modern conditions than at present exists in that Dependency.

P.S.—Please be good enough to return the certificate of the Indian registration, which is the private property of the firm mentioned therein, as soon as Your Lordship has inspected it.

Annex.

Memorandum by the Cutlers' Company of Sheffield upon the present state of the law with regard to trade marks in India.

As the Secretary of State will doubtless be aware, the Cutlers' Company in Sheffield is the registering authority for trade marks relating to businesses carried on within the district of Hallamshire and six miles compass of the same.

In connection with the performance of their public duties in this regard, communications are constantly sent by the Comptroller-General of Patents, Designs and Trade Marks, to the Cutlers' Company bearing upon the existing state of law with regard to trade marks in various foreign countries and British Colonies and Dependencies.

Recently there has been communicated by the Comptroller to the Cutlers' Company certain information with regard to the state of the law as to trade marks in India, and I have the honour to refer Your Lordship to letters from the India Office to the Board of Trade, dated the 14th January and the 14th May in this year, and to the enclosure in the letter of the 14th May being a despatch from the Indian Government to Your Lordship, in reply to Your Lordship's Despatch, No. 12 (Revenue), dated 17th January 1902, in which you forwarded to the Indian Government certain correspondence with the Patent Office with regard to the effect of registration in India of trade marks.

From the despatch of the Indian Government it would appear that contrary to the general impression, which, as I shall point out to Your Lordship later, has been translated into actual practice, it would appear that there is nothing in India, either directly or indirectly, amounting to a registration of trade marks in that country, and that the only protection afforded to mark holders in that country is such as is contained in the Indian Merchandise Marks Act, 1889 (IV of 1889).

Further, the Indian Government state that if a civil remedy was sought, by way of damages, or injunction, the Indian Courts would be guided by the Common Law and "it would be a question of fact, to be decided in each case, whether user in the United Kingdom has created an exclusive right in any particular Indian market."

Now I am directed by my Company to point out that this is precisely the state of things which would exist in this country if the Acts relating to the registration of trade marks were repealed.

But, having regard to the undoubted advantages which have accrued from the laws relating to trade marks in this country, could anyone be found in these days who would argue that sufficient protection was given to traders by reason of the existence of the Common Law with regard to trade marks which obtained in this country before the passage of Trade Marks Act and of the Merchandise Marks Act, 1887?

The Cutlers' Company desire to point out to Your Lordship that the state of things in India at the present time is precisely the same as obtained in this country previous to the passage of the Trade Marks Registration Act, 1875, save that the Indian Merchandise Marks Act of 1889 is a modern enactment, whereas in 1875 the English Merchandise Marks Act of 1862 had become defective.

Particularly it is desired to call Your Lordship's attention to the phrase quoted from the letter of the Indian Government as to the question of fact to be decided in each case of trade mark infringement in India, and to point out that it is this initial expense which is frequently of a very heavy character, involving commissions to this country and the like which is the great defect of the law in India at the present time, inasmuch as, in the absence of any system of trade mark registration, each mark holder in every case that he brings before the Indian Courts is compelled to go through the old process of proving his title to the mark, just as was the case in this country prior to the passage of the Trade Marks Registration Act, 1875.

Hitherto mark holders have registered their marks in the Calcutta Registry Office, and have received from the Registrar of Calcutta a sealed document, duly stamped, attesting the registration, and it is not to be wondered at if, under the circumstances, it should have been generally supposed both by practitioners and the public that a qualified registration was permitted in India, and therefore the announcement of the Government of India that they are "unable to find any authority for the statement made that trade marks are registered in India," and that "the law does not provide for such registration in the country" has taken all concerned by surprise.

An instance of the registration in India, showing Your Lordship exactly what the form is, is sent herewith.

Assuming, however, that the statement of the Government of India is as must be the case correct, the Cutlers' Company would suggest to Your Lordship that the time has come when that Government should follow the example of every civilized State throughout the world, and establish a system of trade mark registration similar in all respects to that which obtains in the United Kingdom at the present time.

The Cutlers' Company believe that they are right in saying that in the whole of the British Colonies at the present time registration systems exist, and surely an important Dependency of the Crown such as India ought to afford to a mark holder that which he can avail himself of all over the world, namely, a system of registration which shall enable him to register his trade mark as his own exclusive property, and in all cases of infringement to be able to produce a certificate of Indian Registry, which, at a nominal expense, proves his title, unless indeed, as in this country the registration itself can, upon proper grounds, be impugned. I may point out to Your Lordship that already there is an office for the registration of patents and designs in India, established under the Inventions and Designs Act of 1888, and that, as in this country, so in India, the registration of trade marks can be constituted as a department of that office.

The Cutlers' Company feel that Your Lordship would not desire that they should enter into any further argument as to the desirability of, and benefit to be derived from, a system of registration of trade marks, and they therefore conclude this memorandum by expressing the confident hope that Your Lordship will move the Indian Government to establish within their jurisdiction a system of registration similar to that obtaining in the United Kingdom, an undertaking, which, having regard to the precedent already established here, need give rise to no difficulty to the jurists of the Indian Government.

Dated this 8th day of July 1902.

HERBERT HUGHES,
Law Clerk to the Cutlers' Company.

Enclosure No. 2.

No. R. and S. 2023, dated 11th September 1902.

From—Sir Horace Walpole, Under-Secretary of State for India, India Office,

To—The Cutlers' Company, Sheffield.

I am directed by the Secretary of State for India in Council to inform you that he has considered the memorandum submitted by your Company in a letter, dated 8th July 1902, on the subject of the registration of trade marks in India.

In reply I am directed to say that between the years 1872 and 1881 the question of establishing a registration of trade marks in India was very carefully and fully considered by the Government of India in communication with the different Chambers of Commerce and other Associations, and a Bill, on the general lines of the English Trade Marks Registration Act, 1875, was prepared and introduced into the Legislative Council. The proposed measure, however, was finally abandoned with the almost unanimous consent of the mercantile community in India, on account of the difficulties and expense which such registration was considered to be likely to occasion.

In view of the arguments put forward by the Cutlers' Company, Lord George Hamilton proposes to ask the Government of India to consider whether the time has not come for re-opening the question, and he is now in communication with the Board of Trade whose opinion he thinks it desirable to obtain before addressing the Government of India.

In returning the document accompanying your memorandum, I am to explain that the registration which it underwent in India is simply the registration of a document, as such, without reference to its contents, and with the sole object of creating evidence of the fact of its existence at a certain date. The Indian system for providing a public registry of deeds and other documents was not devised with any reference to the law with regard to trade marks.

Enclosure No. 3.

No. R. and S. 2023, dated 11th September 1902.

From—Sir Horace Walpole, Under-Secretary of State for India, India Office,

To—The Secretary, Board of Trade.

I am directed by the Secretary of State for India in Council to forward herewith, for the perusal of the Board of Trade, a copy of the communication* noted in the margin from Mr. Herbert Hughes, Law Clerk of the Cutlers' Company, urging the establishment in British India of "a system of trade mark registration similar in all respects to that which obtains in the United Kingdom at the present time."

* Letter, dated 8th July 1902, with enclosed memorandum.

In bringing this communication to the notice of the Board of Trade, it may be well to give a very brief outline of what has taken place in India in regard to this matter in past years.

2. In the year 1877 the Chamber of Commerce and the Millowners' Association at Bombay addressed the Government of India, advocating the establishment of a system of trade marks registration in India, and in the year 1879 a Bill was introduced in the Legislative Council of the Governor-General, based on the English Acts then in force. Those responsible for that Bill were prepared to insert in it certain concessions in favour of the holders of marks registered in England, and it is reasonable to suppose that, if the limited "priority" contemplated by the Paris Convention of 1883, or by sections 103 and 104 of the English Act of 1883, had then been thought of, they would have been prepared to grant that too; but, subject to any such concessions that might be granted, the holders of marks registered in England would have had to come in and register in India like anyone else.

3. While the Bill was before the Select Committee, to which it was referred, it was found that difficulty was likely to arise with holders of registered English marks—and especially with the holders of cotton marks—who would be practically compelled to register afresh in India, and who, it seemed, would not be content to register on the above lines. A considerable discussion ensued, and ultimately the Bombay merchants and manufacturers, who had asked for the Bill, changed their minds and declared that the Bill was not needed, and might cause inconvenience, and, at all events, they desired that it should be dropped unless it could be passed in the form in which it had been introduced. Upon this, as no one either in India or in England pressed for legislation, the Bill was dropped.

4. Since then there have been references to the matter in letters received from the Government of India, from which it might be supposed that manufacturers and merchants in India would be opposed to any legislation on the subject; but it may be that there would be little or no opposition there if it was well understood that the holders of trade marks registered in England would be satisfied with a Bill drawn on the lines above indicated, that is to say, a Bill which, subject to the concession of the "priority" above referred to, and any other minor concessions that might seem reasonable, would require them to register in India in the same way as anyone else.

5. It would appear from Mr. Herbert Hughes' letter that the Cutlers' Company would be satisfied with such a Bill, and seeing that the South Australia Trade Marks Act, 1892, and, as Lord George Hamilton understands, other Colonial Acts, have been passed on somewhat similar lines, it is presumed that the holders of English registered trade marks generally would now be content with such a measure, but Lord George Hamilton would be glad if the Board of Trade could put him in a position to inform the Government of India whether such is the case.

A copy of the reply that has been sent to the Cutlers' Company is enclosed herewith.

Enclosure No. 4.

No. F. 12451, dated 20th July 1903.

From—T. W. P. Blomfield, Esq., Secretary, Finance and General Department, Board of Trade,

To—The Under-Secretary of State for India, India Office.

I am directed by the Board of Trade to refer to your letter of the 7th January last, R. and S. 42, and to previous correspondence on the question of the registration of trade marks

in India, and I am now to transmit to you herewith, for the information and consideration of the Secretary of State for India, a copy of a communication which the Board have received from the Association of Chambers of Commerce of the United Kingdom on the subject, together with a copy of the letter from the Manchester Chamber of Commerce which accompanied it.

Annex 1.

Dated 17th June 1903.

From—EDWARD W. FITHIAN, Esq., Secretary, Association of Chambers of Commerce of the United Kingdom,

To—The Assistant Secretary, Finance and General Department, Board of Trade.

With respect to the letter of the 14th January last from the Board of Trade enclosing copy of certain correspondence on the subject of registration of trade marks in India, I am directed by the Executive Council of this Association to inform you that they circulated copies of the above correspondence amongst Chambers of Commerce interested in trade with India for the purpose of eliciting their opinion on this question.

Replies have been received from the Chambers of Commerce of Birmingham, Halifax, Lincoln, Plymouth, Sheffield and Wolverhampton, in favour of the establishment in British India of a system of Trade Mark Registration similar in all respects to that which obtains in the United Kingdom at the present time. At the same time I am directed to forward you the enclosed letter from the Manchester Chamber of Commerce, which has given great attention to the subject of Trade Mark Registration in India, in which a contrary opinion is expressed. This view, however, relates specially to marks in the cotton classes.

Annex 2.

No. F. 12451, dated 12th May 1904.

From—ELIJAH HELM, ESQ., Secretary, Chamber of Commerce, Manchester,

To—EDWARD W. FITHIAN, Esq.

The Board of Directors of this Chamber has had under consideration the question of Trade Marks Registration in India referred to in your Circular No. 458.

I am directed to inform you that the Manchester Chamber has long been opposed to the separate registration of trade marks in India. Its opposition is founded partly upon long and abundant experience of trade marks administration with reference to the cotton classes (Nos. 23, 24 and 25). When the British Act of 1883 was under consideration, the difficulty was foreseen of securing proper registration in these classes owing to the enormous number of marks in use and the necessity of determining beforehand which marks were common property and which were justly capable of appropriation. A Committee of this Chamber was therefore constituted at the request of the Government, and after many months of arduous labour a classification on these lines was made. That Committee (the Trade and Merchandise Marks Committee of this Chamber) still retains some of its original members, and to it have been referred by the Registrar, ever since 1883, all doubtful applications in the cotton classes.

The work of deciding upon such references which is constantly going on cannot be satisfactorily conducted except by persons of large experience, and such it is impossible to obtain in India whether from officials or non-officials. In so far as these classes are concerned, therefore, the establishment of a Trade Marks Registration Office in India would inevitably lead to confusion, and would invite infringement and litigation.

Moreover, Lord Herschell's Clause of the Merchandise Marks Act, section 3 (2), has been found to be highly efficient for the protection of proprietary rights in even non-registered marks. There are Indian merchants in Manchester possessed of thousands of marks who constantly rely upon it, and have in fact many hundreds of marks which they are able successfully to retain under that clause without registration. I should add that the Indian Merchandise Marks Act contains a similar clause which has been found effectual for its purpose.

No. R. and S. 1874, dated 7th August 1903.

From—SIR T. W. HOLDERNESS, Secretary, Revenue and Statistics Department, India Office,

To—The Secretary to the Government of India, Finance and Commerce Department.

With reference to the Secretary of State's Despatch No. 115, Revenue, of this date, I enclose a copy of the document referred to in the memorandum forwarded on 8th July 1902 by the Cutlers' Company and in paragraph 3 of Sir Horace Walpole's letter to the Company dated 11th September 1902, R. and S. 2023.

I, Maurice Remfry, of 5, Fancy Lane in Calcutta, British India, Solicitor, do solemnly and sincerely declare that, to the best of my information and belief, *Sanderson Brothers and Newbould, Limited*, of Newhall Steel Works in the City of Sheffield, England, Manufacturers of Steel Files, Edge Tools and Metal goods generally (hereinafter called " the said Company ") is the successor in business to Sanderson Brothers & Co., Limited, of Attercliffe Steel Works, Newhall Road in the said City of Sheffield, in whose name the Trade Marks Numbers 1 to 5 inclusive described and shown in the original Declaration of Edwin Jackson Brown, the Secretary of the said Company, dated the 22nd day of April 1902, hereunto annexed, were registered at the Calcutta Registry Office on the 2nd day of April 1897 under Number 161 of 1897; also that the said Company is the successor in business to Samuel Newbould & Co., Limited, of Newhall Road aforesaid, in whose name the Trade Marks Numbers 6 to 13 inclusive described and shown in the said annexed Declaration were registered at the Calcutta Registry Office on the 2nd day of April 1897 under Number 160 of 1897; and that the statements contained in such annexed Declaration are true.

Dated this 29th day of May 1902.

(Sd.) MAURICE REMFRY.

15, HARE STREET,
Calcutta.

Presented for Registration between the hours of 1 and 2 on the 29th day of May 1902 a the Calcutta Registry Office by M. Remfry of No. 5, Fancy Lane, Calcutta, by occupation Solicitor Executant.

(Sd.) MAURICE REMFRY,
„ BEHARI LAL CHANDRA,
Regr.

29th May 1902.

Execution was admitted by the aforesaid executant, who is personally known to me.

(Sd.) BEHARI LAL CHANDRA,
Regr.

29th May 1902.

Registered in Book IV, Volume 3, pages 98 to 103, being No. 166 for 1902.

(Sd.) BEHARI LAL CHANDRA,
Regr.

9th June 1902.

I Edwin Jackson Brown Secretary for and on behalf of Sanderson Brothers and Newbould, Limited, of Newhall Steel Works in the City of Sheffield England Manufacturers of Steel Files Edge Tools and Metal goods generally do solemnly and sincerely declare that my said Company is the successor in business to Sanderson Brothers & Co., Limited, of Attercliffe Steel Works Newhall Road in the said City of Sheffield in whose name the Trade Marks numbers 1 to 5 inclusive hereinafter described were registered at the Calcutta Registry Office on the second

day of April one thousand eight hundred and ninety-seven under number 161 of 1897 ; also that my said Company is the successor in business to Samuel Newbould & Co., Limited, of Newhall Road aforesaid in whose name the Trade Marks numbers 6 to 13 inclusive hereinafter described were registerd at the Calcutta Registry Office on the second day of April one thousand eight hundred and ninety-seven under number 160 of 1897, of which Trade Marks numbers 1 to 13 inclusive representations appear on the paper hereto annexed marked "A."

Trade Mark number 1 consists of the word "Palmyra" in ordinary Roman capitals.

No. 2—Consists of the word "Pax" in ordinary Roman capitals with two laurel branches crossed underneath.

No. 3—Consists of the word "Pitho" in ordinary Roman capitals.

No. 4—Consists of the representation of a goat drawing a small mail cart.

No. 5—Consists of the representation of a safety bicycle with a man thereon in the act of racing.

No. 6—Consists of the name "John Simpson & Co." in ordinary Roman capitals.

No. 7—Consists of the name "George Hall" in ordinary Roman capitals.

No. 8—Consists of the name "Loxley" in ordinary Roman capitals.

No. 9—Consists of the name "Samuel Newbould" in ordinary Roman capitals, the word "Samuel" being shown over the word "Newbould."

No. 10—Consists of the name "Newbould" with the letters "I N" inverted before the name, all in ordinary Roman capitals.

No. 11—Consists of the representation of an Indian Palki in which are seated two Baboos carried by four bearers and the words "The Palki" in ordinary Roman capitals underneath.

No. 12—Consists of the representation of a bullock dak with two bullocks harnessed thereto and a native stool behind.

No. 13—Consists of a label bearing the representation of an Indian on horseback in the act of shooting at two lions at the heels of the horse with trees in the back ground and the words "Burmese Cast Steel Pit Saw" at the head and "made only by S. Newbould & Co., Limited, Sheffield," at the foot of the label.

The said trade marks are respectively registered in the United Kingdom of Great Britain and Ireland under the provisions of the Patents, Designs and Trade Marks Act 1883 to 1888 in respect of the following goods, that is to say :—

Nos. 1, 2 and 3—Each in respect of unwrought and partly unwrought metals used in manufacturing machinery and parts thereof; Agricultural and Horticultural Machinery and parts thereof; Cutlery and Edge Tools including Files and Saws ; Hardware and Metal Tools and goods not having a cutting edge.

No. 4—In respect of unwrought and partly wrought metals used in manufacture ; Edge Tools, Files and Saws and Spanners, Anvils and Vices.

No. 5—In respect of unwrought and partly wrought metals used in manufacture.

No. 6—In respect of Reaping Machine and Chaff Knives and Saws.

No. 7—In respect of Saws and Files.

No. 8—In respect of Steel and Iron and Files.

No. 9—In respect of Steel and Iron, Reaping Machine and Chaff Knives, Sheep Shears and other Shears, Saws, Forks, Razors, Scissors, and every description of Cutlery, Axes, Adzes, Plane Irons, Chisels, Gougers, and other Edge Tools.

No. 10—In respect of Files.

No. 11—In respect of Cutlery and Edge Tools including Files and Saws.

Nos. 12 and 13—Each in respect of Saws.

And I make this solemn Declaration conscientiously believing the same to be true and by virtue of the provisions of the Statutory Declarations Act, 1835.

Declared at the City of Sheffield, England, this 22nd day of April, 1902. Before me.

(Sd.) E. J. BROWN.

(Sd.) REGINALD WEBSTER,
Notary Public.

April 22, 1902.
(Intld.) R. W.

This is the paper writing marked A referred to in the annexed Declaration of Edwin Jackson Brown made this 22nd day of April 1902.

Before me.
(Sd.) REGINALD WEBSTER,
Notary Public.

MILLOWNERS' ASSOCIATION,
BOMBAY, 12*th November* 1903.

THE UNDER-SECRETARY TO GOVERNMENT,
REVENUE DEPARTMENT,
BOMBAY.

SIR,

Under the instructions of the Committee of the Bombay Millowners' Association, I have the honour to acknowledge the receipt of your letter No. 7310, dated the 17th October, with accompaniments, relating to the proposal that legislation similar to that existing in the United Kingdom in respect of the registration of Trade Marks should be introduced into India.

2. In compliance with the request made in that letter the matter has been carefully considered by my Committee, who now instruct me to say that they do not think such legislation necessary or desirable. They are aware that the effective registration of certain classes of Trade Marks in the United Kingdom has become a matter of extreme difficulty; and they believe that in India a similar system would be impracticable and if practicable injurious. It appears to my Committee that the Indian Merchandise Marks Act in principle does all that the law can do for the protection of Trade Marks in a Continent so large as India, and that what dissatisfaction exists in the matter is due to the slowness and costliness of litigation which, under any Act, would presumably be necessary in the last resort for the establishment of a right of user. The injury done either to buyer or manufacturer by a counterfeit Mark depends in reality on whether the counterfeit does in fact lead the buyer to suppose that he is getting what he is not getting. Under the Merchandise Marks Act a merchant or manufacturer can protect his mark in a particular market if he can show that it is in that market regarded as distinguishing his goods. My Committee do not see how any system of registration in Calcutta or elsewhere could either affect such a question of fact or justify the disregard of it when it existed. And so far are they from believing that any such system of registration would simplify, expedite or obviate litigation in connection with Trade Marks, that they would rather expect the effect of legislation on the lines suggested to be a considerable increase in the number and complexity of the cases to be tried and the obscuration of the broad principle above stated.

I have, &c.,
FREDERICK NOEL-PATON,
Secretary.

Proceedings of the Annual General Meeting.

The Annual General Meeting of the Members of the Bombay Millowners' Association was held on Friday, 15th April 1904, in the room of the Association, Graham's Building, Mr. Bomonjee Dinshaw Petit presiding. There were also present: Mr. Sassoon J. David (Standard and David Mills), the Hon. Mr. Vithaldas Damoder Thackersey (Hindustan, Western India and Indian Mills), Mr. Munmohandas Ramji (Indian Manufacturing Company, Ld.), Mr. Dinshaw E. Wacha (Morarji Goculdas and Sholapore Mills), Mr. Narandas Purshotumdas and Mr. Pranjivandas Narandas (Saraswattee Mills Company, Ld.), Mr. F. C. Macrae (Gokak Water and Manufacturing Company, Ld.), Mr. Fazulbhoy C. Ibrahim and Mr. Jamsetjee A. Wadia (Currimbhoy Mills Company, Ld.), Mr. C. N. Wadia (Century and Textile Mills), Mr. H. E. E. Procter and Mr. H. Gawthorn (Kohinoor Mills Company, Ld.), Dhunjibhoy B. Petit (Emperor Edward, Pabani, Oomri, and Godavery Companies), Mr. S. A. Nathan (E. D. Sasoon Mill), Mr. N. B. Saklatwalla (Swadeshi Mills Company, Ld.), Mr. H. R. Oomrigar (Jubilee Manufacturing Company, Ld.), Mr. Morarji Narotumdas, Mr. J. K. Parulker, Mr. J. Owen (Sassoon S. and W. Company Ld.), Mr. Ahmedbhoy Habibbhoy (Nicol Mill), Mr. J. Bradbury and Mr. W. H. Brady (Colaba Land Mill Company, Ld.), Mr. D. C. Shroff (City of Bombay Mill), Mr. James Nissim (David and Standard Mills), Mr. Dwarkadas Dharamsey and Mr. Vassanji Bhugwandas (Tricumdas Company, Ld.), Mr. Hurgovandas Moolchund (Alliance Cotton Manufacturing Company, Ld.), Mr. A. K. Leslie (Apollo, Imperial, James Greaves, etc., Mills), Mr. Dwarkadas Runchordas (Presidency Mills Company, Ld.), Mr. Haji Usoof Haji Ismail (Elphinstone Mill), Mr. Madhawji D. Thackersey (Hindustan and other Mills), Mr. Goolam Hoosein Allana Munji (Indo-China Mills), and Mr. Frederick Noel-Paton, Secretary of the Association.

THE CHAIRMAN'S SPEECH.

In moving the adoption of the report, the Chairman said :—This evening it is again my privilege to address you as President of this important assembly, comparatively an easier task this year as we have very little progress to report during the year under review. Besides, the factors influencing the industry we are representing, are somewhat circumscribed and peculiar in their character, and necessitate in reviewing the annual report a repetition of most of the facts that were put before you last year. The presidential address is necessarily awaited with high expectations, but under the circumstances I have just stated I propose to review the situation briefly, touching upon those points only on which I had opportunities of making closer study, leaving the rest to those of my colleagues who are better situated than myself to express an opinion. Before I proceed with the business of the day, I must in unstinted language express our great appreciation of the elaborate report submitted for our adoption, and the various topics in connection with the work have been handled in a manner, that conclusively points to the high order of ability of our indefatigable Secretary. With the march of time the questions affecting our industry are getting more and more complex, and with an overwhelming array of statistics our annual dissection of facts would indeed be difficult, were it not for the analytical and elaborate report that lightens our task. To commence with, it is gratifying to announce that the year 1903, in spite of obstacles which I shall presently state, has been able to show a better record than last year, as is evidenced from the balance sheets of various companies.

FORMIDABLE AND ADVERSE FACTOR.

The mill industry intrinsically dependent as it is on our premier agricultural produce would have certainly had a very prosperous year if the price of cotton had the same easy run it had for the first nine months of the year, but unfortunately for us a formidable and adverse factor marred the bright prospect. Commencing from October the American receipts foretold a decrease in the crop, in consequence of which and the cornering operations of the speculative bull-party headed by the Sully Ring, the prices began to go up by leaps and bounds, touching an unprecedented figure and establishing a record since the American Civil War. If the abnormally high prices have had the effect of dislocating an industry the importance of which

to the world cannot be too strongly impressed, they have their bright side, inasmuch as they stimulate production elsewhere, and we accordingly see of late serious and systematic attempts being made to promote the growth of cotton in new fields. England, France, Germany and Russia are using every endeavour and straining every nerve to get up fresh fields, alive as they are to their dependence upon America for this unique clothing fibre. The report shows an increase of 36,332 spindles for all India, Bombay Island contributing 9,613. The looms in like manner have been augmented by 1,508, of which 280 fall to the share of Bombay Island. Now, gentlemen, this figure of 280 would at once strike us all as a very insignificant number. Last year and the year before it was strongly urged that the addition of looms at least in concerns that could afford to introduce them would prove remunerative and help millowners at a time when the price of yarn was unfavourable. With all this it is surprising to see only 280 looms being added to the local weaving capacity against 1,228 which our other friends with characteristic enterprise put up and worked at a profit. Reverting to the progress made it will appear that the rise in both the departments is insignificant and scarcely worth recording. The consumption of the raw material also shows only a small increase of 36,000 bales or about 2 per cent. over last year.

INCREASE OF THE COTTON CROP.

When the attention of nations is engrossed in finding out means whereby the cotton crop of the world may be increased, we in India should strenuously strive towards the same object, but greater attention should be devoted to the production of longer stapled cotton if we are to hold our own in promoting the growth of our industry. For the last three or four years I have been constantly urging along with my other colleagues that the out-turn of our mills ought to be made to meet the demands of our own country for goods of finer counts which, besides being large, ensure us a ready and profitable market, thus minimising the risks and expense of exporting annually about 5 to 6 lakhs bales to China, and doing away with the uncertainty of that market and the probable loss owing to an excessively unstable exchange consequent on the closing of the mints. I do not, however, wish it to be inferred that exports are to be discouraged ; far from it, but our local demands are so great that it is our bounden duty to meet them—profitable as they are—reserving our surplus turn over for purposes of export. But to meet the demands of Hindustan, we must put forth all our efforts to turn out yarn and cloth of finer counts. As I had already dwelt on this question last year, I will not trouble you with reiteration, but the spinning and weaving of yarns and cloths of finer counts, whilst doing away with the necessity of exporting yarn to China, will at the same time free us from having to look to Manchester for goods of higher counts. It is, however, a *sine qua non* that the cotton grown must be of long staple and that would be the basis of all our future prosperity. I have been criticised in the press for seeking state-aid in a matter which, whilst of the greatest importance to us, is so colossal as to be beyond the undertaking of a body like the Millowners. It is, however, gratifying to see that my representations to Government—for I drew their attention to the subject when in the Legislative Council—and my public utterances have borne some fruit as evidenced by the activity of the authorities in that direction by means of experimental farms at Poona and elsewhere, whereby the process of hybridization the aim in view is sought, and not without success. The recent phenomenal rates of the raw material have bestirred the Cotton Growing Associations and other interested bodies in Lancashire, and their joint and powerful representation to Government ought to be productive of good results.

EXPORTS TO CHINA.

In casting a retrospective look at the figures of exports of yarn to China since the year 1877, it is encouraging to behold that 1903 shows the highest figure, *viz.*, 604,000 bales, being an increase of about 50,000 bales on last year, and the current year will be able to show a still greater increase, for the plain reason that owing to the Russo-Japanese War the production in Japan will be curtailed by about 50 per cent., in consequence of the mills which were hitherto working day and night only working by day. This will naturally restrict the Japanese export to China, creating a demand for our productions, and with a greater demand higher prices will

result. As Japan from being a consumer of our yarns has not only turned a producer but a rival to us in the China Market, it may perhaps interest you to know the comparative growth of the rival spindles.

ALL INDIA.

1899	Spindles	47,28,333
1903	„	50,43,297
Increase ...		3,14,964 or 6·66 per cent.

JAPAN.

1899	Spindles	12,16,000
1902	„	12,31,000
Increase ...		15,000 or 1·25 per cent.

I am only stating these figures to show that the Japanese industry is not as flourishing as may be expected of that nation and the percentage of increase of spindles of our mills during the same period is about five times greater. All the same even this slight growth of Japanese industry constitutes a source of danger to us which ought not to be underrated. Whilst our export in yarn is yearly increasing, it is deplorable to see that of cloth to China showing the reverse.

In 1888	we shipped	11,320 packages or	1,57,51,682 yards.
„ 1902	„	500 „	5,69,758 „
„ 1903	„	138 „	1,68,081 „

This clearly demonstrates that we are losing our hold on the China Market which is making itself independent to some extent of the Indian cloth. It is a hopeful sign that good times in India have brought forth a revival of the demand, but it would be highly injurious to lose ground in a market when once we have created a foothold there. We must by all effort keep up our exports there even at a sacrifice, and thus be in touch with a market to which we have to turn during lean years for the disposal of our production. Our marks and labels should as far as possible be continuously kept before Chinese consumers—be the quantity ever so little.

VENTILATION OF COTTON MILLS.

The ventilation of cotton mills is a subject which appeals to the official and the non-official mind from a different point of view. The official mind devoid of industrial experience and inspired by medical and hygienic text-books would instinctively settle the question by a flow of fresh air through the factory at the rate of so many hundreds or thousands of feet per head per hour. The manufacturer knows that the success of spinning and weaving depend so much on the temperature and proportion of moisture in the air that in certain states of the weather ample ventilation from the official point of view would practically upset every process in a mill from the opening machine to the weaving shed. Although I have been assured that the subject of mill ventilation offers less of scientific difficulty than many other subjects that are well known to all competent mill managers, the fact remains that it has been systematically shirked, with the result that the trade is now threatened with the interference of an authority less experienced than the manufacturer, but armed with powers that, if misused, might cause infinite prejudice to the trade in India. There can be no doubt that the principles that have been so successfully applied in England are common to the ventilation of factories in both countries, but every English mill manager in India finds so many differences of conditions existing between the work as carried on there and here, that to invite an English expert to settle the question for us without previous experience of mills in India would, to say the least, involve a very serious risk of failure. This matter is as old as the history of cotton spinning in Bombay, and had it received as much practical attention from our Association as some other subjects, we should now have been past the possibility of friction with the representative of

Government. I have read in the *Indian Textile Journal* that mill ventilation must be based on two major factors : the supply of good air to the lungs of our operatives and of moisture to the cotton fibre in process of manipulation. We have tried to utilise the wind, but have found it a most unreliable agent, both as regards velocity and moisture, for both the operatives and the cotton require a perfectly regular supply. This we are able to ensure with the aid of our prime movers.

SUPPLY OF FRESH AIR.

We have to decide on the supply, per head and per hour, of fresh air ; on the system of moistening it when necessary previous to distribution, and on the best means of distribution in order to avoid excessive draughts. For years past the *Indian Textile Journal* has given special attention to the subject of mill ventilation, not in a mere chronicle of reports and inventions, but in ably written articles based on special and intimate knowledge of the local conditions of manufacture, and of the varied meteorological conditions of the manufacturing districts. This information has not been appreciated at its just value, although it contains the essence of the information that we are in need of at present.

TRADE MARKS REGISTER.

The Registration of Trade-marks has been no doubt a very arduous task and the alphabetical order will make it easy of reference. Matters could be much simplified if everybody concerned co-operated with the Secretary and called at the office to discuss when required. As for the economic factors affecting the trade, I will leave to my able colleagues who will follow me to expound their views thereon. The industrial water rate is another factor claiming our attention. It is good that we have enlisted the sympathies of capable men in the Corporation, whose able exposition of the apparent injustice to trade will secure us the reduction eagerly sought for. At any rate we fully expect a compromise as regards the water consumed for drinking and ablution purposes by the mill-hands during working hours.

COTTON DUTIES.

In spite of our repeated protests against the imposition of cotton duties, I am afraid we can expect little encouragement from Government in this direction. I leave this matter to be dealt with by other members. It is more than likely that for some time to come India will not be rid of the dire epidemic of plague, and the question of housing the mill operatives assumes a grave and economic aspect. The Bombay Improvement Trust has come forward to solve what constitutes a difficult question, and in the interest of operatives as well as the industry, every millowner ought to co-operate with the Trust in ensuring the labouring class healthy quarters with tolerable rents. As for the short reeling of yarn, I trust our Vice-President, who was one of the Committee and well conversant with the subject, will favour the Association with his views. Before I resume my seat I should like to say a word or two about the Imperial Federation and the Fiscal Policy of the ex-Colonial Secretary. It is out of place to speculate here as to the issues involved, but all I desire is that if India is to be included in the preferential arrangement, her interests will be safeguarded.

Mr. SASSOON J. DAVID.

In seconding the adoption of the report, Mr. Sassoon J. David said :—I shall, with your permission, take this opportunity to supplement the Chairman's interesting review of the report with a few words in reference to some of the questions that have been occupying our time and attention during the year under review. Speaking both as a millowner and a shipper of yarn, I may say that the year 1903 has been a record one as regards exports to China. The increase in shipments was due to a combination of circumstances that are unhappily seldom met with in our dealings with the Far East. There was from the beginning of the year a steady rise in prices both here and in China, and we were able to carry on, until about the end of last year, a large business with that country, with a fair margin of profit, which was all the more welcome as profitable years have not been so common of late as to compensate for bad times. That the mills have been able to dispose of their production months ahead profitably during the past year was not due to China responding at once to the local advance in prices, but to the fact that

purchasers here were buying largely in anticipation of rise in China where the improvement in prices though slow was continuous. The prolonged tightness of money in China during the greater part of last year, and which exists even now, has, however, had the effect of associating an ever present risk with our relations with that country, and prevented the merchants there from responding, as they would have done under ordinary circumstances, to the great rise in prices in Bombay. Moreover, exchange transactions between China and India could not be carried on satisfactorily, which also hampered us a good deal. The Banks in China, owing to the scarcity of sycee, were willing enough to sell rupees for ready clearance, but they offered such exceedingly low rates for forward transactions, that it was very difficult to do any business without undertaking great risks. I allude to this subject as it is a matter of great importance to us and is likely to affect us, until China establishes a gold standard. The Banks in silver-using countries always refuse to enter into forward exchange transactions with India, whenever the Indian Government suddenly comes forward as a large buyer of silver. They naturally do not like to undertake risks, since they cannot calculate what their position would be some weeks ahead. Last year the Government came into the market as a large buyer of silver and the Banks at once confined their exchange transactions with India to immediate requirements.

AN APPEAL TO GOVERNMENT.

Considering the enormous business we are doing with China I wonder if it would be too much to ask Government to minimise the hardship entailed on those who trade with silver-using countries, as the result of the currency legislation, by so adjusting its purchases of silver as to always leave a reserve for minting purposes, and thus render it unnecessary to upset the market by sudden operations on a large scale. Another advantage that would result from Government thus adjusting its purchases and spreading it over a longer period of time, would affect large interests among the masses, and though it is not within our province to enter into the question, I cannot help remarking in passing that if fluctuations in silver are reduced to a minimum by any action that Government might take in the matter, it will have the effect of maintaining the price of silver somewhere near its normal level, and then it will gradually dawn upon the masses that they are acting very foolishly in hoarding silver as they do now, in the belief that present fluctuations indicate the possibility of a rise in the value of that commodity some day—an illusion which ought to be dispelled if they are to be protected against the recurrence of a ruinous smash similar to that experienced by the hoarders of silver when the mints were closed. While on this subject, it may interest you to know that, according to a Shanghai paper, the Chinese Board of Revenue have fixed upon seven mace, three candareens, in other words seventy-three tael cents, or a dollar, as the uniform standard of coinage, and that next year gold coins are to be minted. By this I understand that the Chinese intend to bring into circulation as the first step towards a gold standard, a national silver coin of a value which would be universal throughout China, in short a coin which would be equivalent to the present British dollar in value. It is to be hoped that this information would be confirmed by the Chinese Government. As regards our position at present, I may add briefly that the close of last year brought us into tumultuous times. While we were congratulating ourselves on what we reckoned as the approach of a prosperous cycle, American speculators jumped up the cotton market to an almost unprecedented point as just pointed out by the Chairman, and effectually crippled the trade all round. Our cotton prices went up in consequence of the rise in America, which forced English and European spinners to buy largely in India and thus raise prices, but the Chinese did not respond to the improvement on prices here, and our quotations to-day are higher by about half an anna per lb. than China prices. An opportunity like this would have been an ideal one to take advantage of to close all our mills for a month or two. The result would have been very advantageous, but the sad experience most of us have had in the past as to the want of unity, when such propositions were mooted before this, rendered it difficult to carry out the idea. A good many mills, however, stopped working on their own initiative and some have been working short-time, which no doubt helped to prevent an intensification of the crisis. I may add that there is a general feeling that we should all join in working short-time like the Lancashire spinners are doing at present, and a resolution to that effect is to be proposed at

this meeting to-day, and I hope that it will be passed unanimously and carried into effect as it would not only tend to ease cotton prices but help to improve prices of yarn in China to an extent that would make it possible to continue spinning without a loss.

PROSPECTS VERY UNCERTAIN.

For this year the prospects are at present very uncertain and rather unsatisfactory. It was fortunate that the Powers, and especially China, agreed to maintain a strict neutrality during the continuance of hostilities between Russia and Japan. No one, however, can prophesy the future. The fear of China being involved in the war, and the scarcity and dearness of cotton, renders all speculations as to the future quite purposeless. And considering how, as a rule, our business with China is affected by some adverse factor or other, I think it should be very much to our advantage to devote greater attention to the local or Indian market, and to endeavour to supply local requirements to a greater extent than we do at present. To accomplish this we must, first of all, have highly trained operatives permanently attached to the industry—a matter of great difficulty in a country like India, and, as stated by the Chairman, the improvement of the staple of our cotton. As soon as we succeed, however, in getting over our difficulties in these respects we should be able to view with equanimity the increasing competition of Japan in the China market, the anticipated growth of the spinning industry in China itself, or the ceaseless anxiety created by fluctuations in the price of silver. In the appendix to the report there will be found the details of a scheme to which I intend giving a trial as soon as a better feeling prevails all round, with the object of finding out whether generous treatment will help us in attaching the mill-hand to his work permanently.

THE NEW TARIFF SCHEME.

And now I would like to refer, though very briefly, to a topic about which it is not likely that we shall hear the last word for some time to come, *viz.*, India's position in the new tariff scheme. The question that most directly concerns us millowners is—whether the powerful voters of Lancashire would allow us a free hand ? To this question would apply, with singular force, the significant statement made by the Government of India in its very able despatch of October last, in which it dealt with the proposed fiscal changes in a most careful and exhaustive manner. The Government said :—"All past experience indicates that in the decision of any fiscal question concerning this country powerful sections of the community at home will continue to demand that their interests, and not those of India alone, shall be allowed consideration." This is, indeed, refreshingly frank, and after this I hope this Association will not be in haste to clamour for preferential tariffs. If India is not offered the same free-hand as the Colonies, preferential tariffs would be a very doubtful boon to her.

HOUSING OF MILL-HANDS.

And now we may revert to local questions, first amongst which is the question of the housing of the mill-hands. This question has been engaging our attention since 1901, and am glad to say that we have at last arrived at a satisfactory understanding with the Improvement Trust regarding this matter. At our last annual meeting I expressed a hope that at the present meeting we shall be able to look back upon an arrangement with the Improvement Trust that would be beneficial both to the city at large and to the mill-hands, who, as a class, form such a large portion of our population. The result of our correspondence with that body has been that all matters of detail are settled satisfactorily and the Trustees have agreed, under certain conditions, to build chawls for mill-hands. As, however, the Improvement Trust Act, as it stands, does not empower the Trustees to undertake the erection of chawls except under a Street or Improvement Scheme, they are now taking the necessary steps to remove all legal and other difficulties that may arise, by asking for amendments in the Act that will empower them to undertake Housing Schemes on their own initiative for the purpose of building sanitary chawls to relieve overcrowding. As the matter is very urgent I have no doubt that the necessary legislative enactments will be passed as soon as possible, and then we shall be able to apply for the necessary accommodation on a scale that promises to relieve overcrowding in the town to a very large extent. We ought to be gratified at the result of our negotiations with the

Improvement Trust, and I must in this connection, and on behalf of the Association, acknowledge our indebtedness to the Hon. Mr. Rebsch, the Chairman of the Improvement Trust, for the interest and the pains he took to arrange the several tedious details relating to the question and to bring it to a successful issue. The housing question has been occupying a great deal of public attention of late, and it is gratifying to us to be able to claim that we have not been shirking our share in the task of solving this very difficult problem. It is alleged that while we, millowners, have helped to introduce overcrowding in Bombay, we are doing very little for the city itself.

TO REMEDY THE EVIL.

Others, and amongst them my friend the Hon'ble Mr. Vithaldas Damodar Thackersey, brought forward a scheme to remedy the evil. Others, again, wanted a syndicate. But if we approach the question dispassionately we shall see that the total estimated population of 2,00,000 that require to be housed would, reckoning at the rate of 4 people to a unit, require 50,000 rooms, or units, for their accommodation. At the very modest estimate of Rs. 400 per unit we would require no less than rupees two crores to provide the required accommodation. To get up a semi-philanthropic syndicate which would support a venture the profits from which would be limited to 5 per cent., but may even figure much below that, would not be an easy matter, and such a syndicate cannot be depended upon to take the initiative for the carrying out of huge undertakings without sufficient inducement, or a prospect of a uniform return. To raise, therefore, even one-tenth of the amount required on the strength of a problematical 5 per cent., would be a difficult task. Secondly, private enterprise must bring us back to rack-renting, profit making, over-crowding, want of sanitation, and many other evils. What is wanted is organised effort, big credit, and legislative support. The Improvement Trust which has these advantages is already devoting large amounts every year to chawl building, and since private enterprise and syndicates are lacking, the Trust is asking for new powers to enable it to undertake a "Housing Scheme." When its operations, under the new powers, are in full swing a very great portion of the 2,00,000 people, for whom accommodation is to be found, will be adequately housed, and there will not remain a very large number in the heart of the city to provide for. As regards millowners and overcrowding, and the criticisms levelled against us, I would only say that we are as much responsible for the unhappy sanitary condition of Bombay as we are responsible for the Mahalaxmi flats; the imperfect drainage system of the city, or some parts of it, or for its insanitary chawls. As regards our share in the overcrowding of the city it should be remembered that this overcrowding was the natural result of the growth in it of a huge industry, and that there is no large town anywhere which is not indebted to its industrial prosperity for the great position it occupies among the large cities of the world. But this apart, I am sure we would not have grudged the capital required for housing the mill-hands had we the means at our disposal. Bombay Millowners are not in the same position as Cadburies and Rowtons and their dividends are precarious, while their industry as a whole is not only at a low ebb but is threatened with unfettered competition in the Far East. So much then for our critics.

THE WATER QUESTION.

But there is another little matter to which, at the risk of encroaching on your patience, I feel tempted to refer and which is the vexed water question. We have, time out of number, appealed to the Municipality to reduce the water-rate for industrial purposes, and the last effort we made in that direction brought us but little satisfaction. It has been shown, conclusively, that the water-rate for industrial purposes, charged in Bombay, is exorbitant, but we are told that it is best that it is so. I wonder why, though. Anyhow, in spite of the paternal attitude of our Municipality, and the religious fervour with which the excise duty is maintained, we are asked to do wonders for Bombay, or to close our mills. I hope better councils would prevail in the future, so as to give the industry that made Bombay what it is, bare justice.

SHORT REELING.

Another subject which is of great importance to us also requires some notice. In October last, a Committee, appointed by the Government of India on which I had the honour to serve as the Representative of this Association, met several times to consider the question of short-reeling, in detail, and to frame the necessary instructions to put a stop to the

practice of short-reeling. The Committee prepared a report in which there were several points to which I was opposed. I therefore placed my objections before a special meeting of the Committee of this Association on the 23rd of October last, as the result of which certain amendments were drafted out and agreed upon. I failed, however, to procure the acceptance of any of these amendments, with the exception of one or two verbal alterations. I therefore, while signing the report, forwarded with it a minute of dissent in the terms of the general principles on which the amendments of the Committee of this Association were based. This minute was approved by our Committee, and I am sure it represented the views of the Association correctly. I was therefore not prepared to hear, at the last meeting of the Bombay Chamber of Commerce, a prominent member expressing himself as believing that the Government Committee's Report—presumably minus my minute of dissent—commended itself to some well-known members of this Association. I am personally not aware of any member to whom the report, as it stands, commends itself. As regards the general question of short-reeling, on looking at local circumstances connected with technical considerations regarding the conditions under which our spinning is done, practical experience makes it quite clear that unless the modifications aimed at in the minute of dissent are accepted by Government, the difficulties of conforming in practice to the rules and instructions embodied in the report will be so great as to virtually fetter any expansion of local business.

This would, no doubt, act very favorably in the interests of English and Continental spinners and give them unequal advantage over us, since, curious though it may appear, our yarn may be tested when and where, and as often as it is deemed fit, while in actual practice the imported yarn, once it has passed the Customs, escapes all further restrictions There is also reason to believe that the present Customs' procedure in respect of imported yarn does not prevent the importation of short-reeled yarns. While on this subject I may add that I hear the Government of India, after receiving the report I have just alluded to, has made another communication on the subject, a copy of which was sent to the Chamber of Commerce. It was to be expected that as we are ourselves chiefly interested in the matter, a copy would have been also sent to this Association, which was represented on the Government Committee, but for some reason or other this has not been done.

There is nothing further that I have to allude to with regard to our doings, but I cannot conclude, without taking this opportunity of endorsing the remarks of the Chairman on one particular point and expressing our obligation to our Secretary for the valuable services he has rendered to the Association. He has on several occasions brought to the notice of the Committee important questions requiring our consideration, which owing to the stress of business would have escaped our notice. I must also refer to the great pains he is taking in helping the Committee to deal satisfactorily with the question of Trade Marks Registration, the effect of which has been to minimise friction between users of trade-marks. The matter, however, has not reached finality as yet, and we are to-day about to introduce one or two resolutions concerning the subject.

VENTILATION OF FACTORIES.

The President has ably touched upon the important question of the ventilation of our factories, and I endorse his reference to the services rendered by the *Indian Textile Journal* in this connection and as regards other matters affecting the staple industry, the interests of which it so ably represents. With these remarks I have now much pleasure in seconding the motion for the adoption of the report.

The HON. Mr. VITHALDAS D. THACKERSEY.

The Hon. Mr. Vithaldas D. Thackersey supported the adoption of the report in the following speech : There is no object to be gained in detaining you with any lengthened remarks after the eloquent and able speeches of our Chairman and Vice-Chairman. I therefore will confine my remarks to only one or two subjects which I consider to be of the utmost importance to our industry.

SHORT REELING.

The question of short reeling by Indian mills has been referred to here. I am sure I voice the sentiments of all present when I say that the result of the delibera-

tions of the Committee appointed by Government has been most disappointing. The very first glance at the Committee's report will not fail to convince any one with practical knowledge of our industry, that the Committee has entirely misapprehended the real object of Government. The Government in their letter to the Millowners' Association say: "The Government of India have decided that measures should be taken to stop the practice of short reeling yarn which is intended for sale in India, and with this end in view they consider that prosecution should be instituted against persons who intentionally manufacture short reeled yarn for sale in India." Nothing can be clearer than this, and no one can take the slightest exception to the reasonableness of the statement; but what has the Committee done? All along the different recommendations point to making the sale of our yarn in India exceedingly difficult and creating a feeling of insecurity in the minds of honest manufacturers. I will give you only one instance from its report.

The Committee in one of its recommendations makes it penal to sell any yarn finer by more than one quarter of a count. It means that if a manufacturer, by over anxiety on his part to follow the sections of the law even unintentionally, gives an average count of 10½ instead of 10s. and thus gives 5 per cent. extra length to the purchaser who would be able to weave greater quantity of cloth to that extent, he can be committed for fraud. I admit the section in our Merchandise Marks Act literally means this, but so far it has been a dead letter. Now, however, we find that the object of the present amendments is to put the law in motion, and it is just possible that the action by inspectors may be more vigorous than is contemplated by Government. It is our duty to see that no impracticable sections are allowed to stand. No British Court of Law would ever convict for fraud any one who unintentionally gives to the buyer an article superior to what he bargains for, dearer than he pays for, and greater in weight than he is charged for, an article which costs the seller more to manufacture. Such a proceeding would logically mean that a person delivering a piece of 22-carat gold when he is getting money for 18-carat gold should be punished for fraud. It may be that for special reasons the purchaser may not require the superior article and may compel the seller to exchange it; but it is preposterous for him to say that the seller committed fraud.

There are several other objections in the recommendations of the Committee, but the instances I have given are, I think, quite sufficient to show that the report of the Special Committee requires minute attention and wholesale amendment to make it practicable. Every one of us is anxious that dishonest and fraudulent practices of short-reeling should be put a stop to. Our Association has willingly co-operated with Government to gain this end; and if the recommendations of our Association as placed before the Committee through our representative had been accepted, the object of Government would have been gained without unnecessary hardship and risk to the honest manufacturers. I am astonished to hear from Mr. David that Government has referred the report of the Committee to the Chamber of Commerce for further information. Well, we have a right to complain against this procedure. On the Committee, the Millowners' Association and the two Chambers of Commerce of Bombay and Karachi were represented; and if any further communication is made to the Chamber with regard to this question, our Association has a stronger claim for such consideration. This procedure our Committee has strongly resented, and I hope, before definite action is taken in the matter, our Association will be given a full opportunity to have its say. There is not the slightest doubt that the good sense of the Government will ultimately prevail, and that they will be in a position to place on the statute book a law, which, while exposing the dishonest and fraudulent persons to punishment, will give assurance of perfect safety to honest manufacturers.

THE WATER TAX.

There is a second matter to which I wish to refer in a few words. When I spoke last year I explained fully how the present policy of the Bombay Municipality with regard to the water tax acted prejudicially to the interests of our industry. Since that time there has been no change. The policy of charging for industrial purposes twelve times the rate charged for ordinary domestic consumption is manifestly indefensible. At the last Budget meeting of the Corpora-

tion the question was raised and debated at considerable length, but ineffectually. You are aware that our mills consume a fair quantity of water for domestic purposes. The mill-hands from early morning to late evening consume a large quantity of water for washing and drinking purposes in the mill premises. For all this water we are made to pay twelve annas per 1,000 gallons against less than one anna paid by an ordinary consumer. It is not to be forgotten that these mill-hands also pay the water tax for the chawls they occupy. My proposition was to the effect that the water consumed for domestic purposes at the mills should be charged for, not at 11 pies, the usual rate, for domestic purposes, but at 4 annas per 1,000 gallons, a rate which the Municipality charges to those who can afford the luxury of a large garden. Even the strongest supporters of the present policy of the Municipality could not deny the reasonableness of this demand, but wanted us to wait another year. To our great regret the proposition was thrown out. Gentlemen, though this result was disappointing, it brought us one step nearer, and I am not without hope that with the large increase in water revenue it will not be long before our industry will receive from the Bombay Municipality that justice to which we are entitled.

TRADE WITH THE LEVANT.

Yet a third matter deserves reference. We have reason to be satisfied with the progress which has been made in our trade with the Levant. In 1900 I moved our Committee to request Government to allow us to utilize the services of British Consuls at different places for the opening up of new markets for Bombay yarn and cloth, and be it said to the credit of our energetic Secretary, Mr. Paton, that by a systematic effort and special attention to the trade with the Levant he has brought about a result which may be characterized as highly hopeful. As pointed out in the report of our Association our export of yarn to ports in the Levant has increased from about 4½ lakhs in 1901-02 to a yearly average of about 26 lakhs lbs. in 1903-04, a sixfold increase in two years. There is no reason to doubt that this market may one day become a great help to our yarn industry. Gentlemen, the most important work of the Committee during the last year was the registration of trade-marks under the new rules. The previous speakers have spoken on this point at sufficient length, and I fully endorse everything they have said in praise of the very excellent work done by our Secretary, Mr. Paton, who successfully met every difficulty that has arisen. Gentlemen, I conclude by strongly supporting the proposition laid before you by the Chairman.

FURTHER DISCUSSION.

MR. MUNMOHANDAS RAMJI, in further supporting the resolution, said the local yarn trade was steadily increasing as was evidenced, from the fact that its exports had increased from 3,11,770 bales in 1893 to 6,04,044 bales in 1903, giving an increase of 100 per cent. during the past ten years. It was significant that the increase had taken place despite currency legislation and other adverse circumstances connected with it. With regard to the question of over-production by the local mills and consequent loss of profit, the speaker suggested that the mill-owners should decide against working the mills with the aid of electric light. Overwork told heavily on the health of the mill-hands, and he was afraid that if the millowners would not take prompt measures to prevent the evil, the Government would step in and pass special legislation against long working hours. Referring to the proposed scheme for providing sanitary houses for the poor, the speaker thought the Improvement Trust was better able to put it into execution than a syndicate, considering the facts that the Trust had an establishment of its own ready at hand and that it could borrow money at 4 per cent. He was of opinion that unless the Trust built at least 25,000 rooms, there would be no end to the question. He next suggested that the Trust should advance the necessary moneys to such millowners as would desire to erect cheap chawls for the accommodation of their workmen drawing Rs. 15 and under a month, provided the millowners did not take into consideration the cost of their ground and the Municipality charged only half the rates. He added that to complete the whole scheme the Port Trust, the Railways, the Government, and the Municipality should provide accommodation for their respective workmen.

MR. H. E. E. PROCTER said he was glad that Mr. Munmohandas had drawn their attention to the fact that their shippings of local yarn had been steadily increasing despite keen

competition and other adverse circumstances. This only showed that Bombay could hold its own against any other place in the world. He thought they should take a more hopeful view of the local mill industry.

The resolution was then put to the vote and carried.

NEW COMMITTEE.

The Chairman then moved : "That Mr. Sassoon J. David be elected Chairman (in place of Mr. Bomanjee Dinsha Petit who has resigned), and the Hon'ble Mr. Vithuldas Damoder Thackersey, Deputy Chairman of the Association for 1904 ; and that the Committee for the same period be composed as follows :—Messrs. Bomanjee Dinshaw Petit, S. A. Nathan, Ahmedbhai Habibbhoy, Dinshaw E. Wacha, N. N. Wadia, C. N. Wadia, W. H. Brady, Gordhandas Khattau, Munmohandas Ramjee, Sir Dinshaw Manekji Petit, Bart., Messrs. N. B. Saklatwala, D. C. Shroff, Jamshedji Ardesir Wadia, Sir J. Cowasjee Jehangir, Messrs. Narandas Purshotumdas, H. E. E. Procter, Herbert R. Greaves, and Fazulbhoy Currimbhoy Ebrahim." He said that taking a keen interest in all that pertained to the industry and in the Association that safeguarded and promoted it, he might be excused if in his zeal he considered it his painful duty since a new Committee had to be composed to mention that some members took very little or no interest at all. They were more conspicuous by their absence. It would therefore be to the interest of all concerned if members who, by some reason or other, were debarred from taking an active part, would decline to serve on the Committee, so that room might be made for others who might be willing to work in the cause of the Association. He trusted that his remarks would be taken in the spirit in which it was offered.

Mr. Dwarkadas Dharamsey seconded the proposition, which was carried.

VICTORIA JUBILEE TECHNICAL INSTITUTE.

Mr. D. E. Wacha moved that the Committee be empowered to pay from the funds of the Association to the Victoria Jubilee Technical Institute the sum of Rs. 3,000, being the Association's donation for the year 1904-05.

Mr. C. N. Wadia seconded the proposition, which was agreed to.

SIR J. J. HOSPITAL ALL SAINTS' NURSING FUND.

Mr. Jamshedjee A. Wadia then proposed that the Committee be empowered to pay from the funds of the Association the sum of Rs. 500 as a contribution towards the Sir J. J. Hospital All Saints' Nursing Fund. He said the work done by the All Saints' Sisters was really praiseworthy, and as a large number of mill-hands were treated at the hospital and derived considerable benefit from their administration, he thought the Millowners' Association should pay a contribution to the fund.

Mr. H. E. E. Procter, in seconding the proposition, said he only regretted that their contribution to the nursing fund was not more than they proposed to pay.

The proposition was carried.

APPOINTMENT OF AUDITOR.

Resolutions were then passed re-electing Mr. Nusservanjee Sorabjee Jamshedjee auditor for the current year on a remuneration of Rs. 100, and amending certain rules and regulations of the Association.

SHORT TIME MOVEMENT.

The CHAIRMAN then addressed the meeting on the subject of short time movement. He said that at a juncture when the mill industry had been passing through a crisis, occasioned by the abnormally high prices of the raw material, it was but in the fitness of things that the question of working short time in their mills should be brought up for discussion. He quoted figures to show that this year they had received 2,68,250 bales less than last year, and the mill consumption had been less by 1,03,000 bales than the same period. On the other hand, the

shipments during the period, however, showed an increase of 1,37,151, whilst the balance in Bombay had decreased by 2,91,401 bales. Now, by adopting the short time measure, he said the mill consumption of cotton would, no doubt, decrease, but this would not be the means to an end. The decrease of consumption generally increased the balance of the raw material and a lowering of prices on account of the greater accumulation. But the outside demand was so great that exporters would eagerly avail themselves of all that they did not touch, the more so at a lower price. Thus the demand would be continual and the position unchanged, and therefore their measure could not be productive of the desired result, *i.e.*, of an increase in the balance and the consequent lowering of price. On the other hand less production would probably result in the rise of price of the manufactured article but would this rise more than counterbalance the higher cost of production involved in the working of short time? The less the production the cost of the same was inversely greater on account of certain fixed charges as interest, insurance, municipal taxes, fixed salaries of managers, headmen, office charges, etc., etc. Thus in trying to avoid a lesser evil, they must take care not to fall into a greater one. In a week of six working days, if the mill was closed for a day, the cost of production was enhanced by 1 to 2 pies per pound; if for two days by 3 to 5 pies per pound. At the same time there were other considerations which were to be reckoned with before a unanimous decision could be arrived at—(1) Some mills had a stock of raw material that would last them for four to six months; (2) some mills up to now were selling their productions profitably; and (3) some mills had made forward sales three to four months with fixed periodical deliveries. It was a question therefore whether they would join the movement under discussion. He would also like to know whether other mill would co-operate, if for reasons given by him some mills declined to work short time. It was not his wish to throw a damper on the movement, but since the topic had been mooted for discussion, it was advisable to thresh it out before adoption.

MR. DWARKADAS DHARAMSEY moved: "That this meeting is strongly of opinion that a short time movement is absolutely necessary in the best interests of the trade, and recommends the working of four days per week until further notice." He said that by adopting the resolution they would enable the prices of manufactured articles to adjust themselves to the cost of raw cotton. Various arguments had been urged against the movement, but they were all directed to an immediate rather than ultimate end.

MR. S. A. NATHAN, in seconding the proposition, said that they must bear in mind that although the stock was not large in China at the present moment, it was likely to increase if their production was to continue at the present rate. He thought they should look at a matter like this not from an individual but general point of view.

MR. NARANDAS PURSHOTUMDAS and MR. MUNMOHANDAS RAMJI were against the proposition and said the movement was not suitable to all the mills.

MR. JAMSHEDJEE A. WADIA said the resolution had been drawn up on the lines of the resolution recently passed by the Liverpool millowners. It was a harmless one and did not bind them in any way.

MR. H. E. E. PROCTER said it was stated that owing to the present war the Japanese spinners would considerably reduce their production. If that were so, he thought, nobody would be more pleased than the Japanese themselves if the Bombay millowners went in for a short time movement. In his opinion instead of reducing they should increase their production whilst the Japanese were busy.

The resolution was then put to the vote and lost by 6 votes to 14.

The proceedings then terminated.

STATISTICS.

Appendix T.

STATEMENT of Imports of Piece-Goods (Grey, Bleached, Coloured and Printed) and of Yarns (Grey and Dyed) from Great Britain into Bombay, Calcutta and Madras, from the years 1851 *to* 1903, *both inclusive.*

Year.	Piece-Goods.			Yarns.		
	Bombay.	Calcutta.	Madras.	Bombay.	Calcutta.	Madras.
	Yards.	Yards.	Yards.	Lbs.	Lbs.	Lbs.
1851	116,351,747	213,757,342	3,712,729	6,384,321	18,281,592	1,289,835
1852	113,567,856	163,851,027	3,731,934	5,681,870	13,946,539	1,503,000
1853	130,838,032	172,098,876	8,038,050	6,849,463	15,350,537	2,068,994
1854	192,200,419	271,208,527	8,695,054	7,668,093	15,650,107	1,946,584
1855	128,193,027	256,069,194	6,542,924	7,447,529	16,901,310	2,107,969
1856	130,459,853	275,016,345	4,517,561	4,559,670	15,224,557	1,923,999
1857	137,761,636	235,190,273	9,375,347	2,838,644	10,691,863	2,370,741
1858	281,836,364	416,362,074	15,431,647	8,744,517	18,369,490	4,036,325
1859	307,086,509	520,899,016	20,425,632	12,899,875	20,043,485	5,741,441
1860	267,443,986	403,351,123	20,648,072	4,571,134	16,641,847	5,656,930
1861	272,573,717	418,671,687	14,628,188	5,578,828	13,933,256	3,694,985
1862	178,803,604	295,508,637	9,748,215	4,811,384	9,594,896	1,675,239
1863	232,321,038	234,645,916	16,352,677	5,592,995	10,394,931	3,702,562
1864	189,812,984	223,036,538	14,787,062	4,268,662	8,742,699	3,447,635
1865	175,486,677	319,047,954	17,291,103	4,078,811	6,981,809	2,232,948
1866	243,476,368	351,572,331	22,081,805	6,877,968	10,795,517	4,629,986
1867	316,784,109	528,434,956	23,258 498	6,568,619	13,006,019	4,684,638
1868	555,337,050	619,101,683	31,793,397	7,780,303	13,236,453	6,873,398
1869	296,158,439	518,741,346	29,683,469	7,981,949	11,858,210	7,773,636
1870	272,898,226	687,639,911	45,750,099	9,946,299	16,816,936	8,649,598
1871	305,416,233	684,926,367	47,560,133	6,097,531	12,041,848	6,876,841
1872	262,849,273	657,123,291	48,177,871	6,163,813	11,490,636	8,616,040
1873	349,631,830	664,987,114	57,666,809	8,667,090	11,192,248	8,918,841
1874	292,843,697	765,762,164	49,878,834	8,867,978	14,041,520	10,510,639
1875	305,917,934	744,439,224	44,683,288	6,863,763	12,945,102	10,104,020
1876	356,940,508	733,913,330	54,875,423	8,246,211	12,090,167	9,664,609
1877	354,779,192	885,688,850	39,106,318	10,624,710	14,364,841	8,683,595
1878	344,068,807	749,233,431	47,038,579	7,754,005	13,967,396	8,373,916
1879	343,811,233	788,759,250	61,375,691	7,469,113	10,580,436	9,581,363
1880	531,050,559	1,007,531,497	77,010,037	13,024,923	16,446,089	12,108,002
1881	544,890,697	947,329,460	82,451,852	12,326,706	13,597,371	11,099,762
1882	500,248,293	883,611,784	106,615,818	12,019,123	14,780,667	13,069,871
1883	572,738,196	878,949,353	107,868,579	16,220,463	13,478,764	11,033,824
1884	568,220,318	908,294,475	120,841,003	14,299,380	15,313,840	13,114,875
1885	547,773,459	911,987,148	93,757,204	14,132,372	13,473,067	9,597,197
1886	700,061,881	1,159,407,968	143,318,736	17,087,709	14,177,149	13,937,810
1887	585,502,258	988,370,500	117,502,619	14,990,151	14,040,137	13,432,638
1888	652,344,548	1,045,951,384	138,271,060	16,595,176	14,778,545	14,570,258
1889	634,608,171	1,031,000,980	144,140,943	13,011,348	11,836,681	13,393,848
1890	665,550,786	1,037,911,379	115,224,797	15,805,515	12,455,601	13,284,690
1891	572,065,309	961,686,226	108,083,576	15,526,869	12,484,617	14,666,189
1892	548,944,867	1,013,742,658	93,892,712	12,427,053	10,108,327	10,390,439
1893	604,439,138	1,009,441,511	106,086,291	10,466,233	13,124,097	11,387,889
1894	719,324,449	1,161,138,343	140,749,235	11,723,808	10,529,734	12,547,763
1895	484,780,087	925,203,136	99,427,366	10,857,586	10,689,066	10,188,466
1896	574,410,316	1,163,967,702	86,265,292	11,649,977	13,403,663	15,402,931
1897	472,597,133	932,328,974	121,396,515	11,788,246	13,299,211	13,650,022
1898	557,557,951	1,202,254,978	91,950,978	10,238,969	11,412,068	11,673,678
1899	611,556,220	1,266,926,546	93,492,746	10,441,484	10,729,842	11,532,812
1900	461,938,302	1,086,463,274	120,383,837	5,892,081	9,435,371	9,496,085
1901	629,976,200	1,127,753,500	129,392,500	7,911,750	11,050,890	9,564,200
1902	475,541,800	1,176,051,500	119,878,000	6,299,820	7,411,640	9,438,560
1903	520,373,400	1,119,542,300	129,898,800	5,300,460	6,442,050	6,699,580

ANNUAL IMPORTS FROM EUROPE INTO BOMBAY OF PIECE-GOODS AND YARNS FROM 1ST JANUARY 1894 TO 31ST DECEMBER 1903.

DESCRIPTION OF GOODS.	From 1st Jan. to 31st Dec. 1894.	From 1st Jan. to 31st Dec. 1895.	From 1st Jan. to 31st Dec. 1896.	From 1st Jan. to 31st Dec. 1897.	From 1st Jan. to 31st Dec. 1898.	From 1st Jan. to 31st Dec. 1899.	From 1st Jan. to 31st Dec. 1900.	From 1st Jan. to 31st Dec. 1901.	From 1st Jan. to 31st Dec. 1902.	From 1st Jan. to 31st Dec. 1903.
GREY GOODS.										
36 in. & under × 37/9 yds. Shirtings	Pcs. 18,23,643	Pcs. 14,28,336	Pcs. 13,21,463	Pcs. 8,05,059	Pcs. 10,73,940	Pcs. 9,39,757	Pcs. 5,91,977	Pcs. 7,69,487	Pcs. 4,64,790	Pcs. 5,76,095
37/9 „ do. do. 5½ lbs. & under ...	„ 1,748	„ 4,261	„ 6,295	„ 7,972	„ 22,838	„ 24,744	„ 21,859	„ 14,577	„ 3,789	„ 6,645
„ „ do. do. 6½ lbs. do. ...	„ 79,228	„ 36,712	„ 52,827	„ 18,288	„ 15,210	„ 29,864	„ 79,251	„ 1,00,120	„ 78,905	„ 1,12,216
„ „ do. do. 7 lbs. do. ...	„ 2,94,931	„ 1,97,528	„ 1,49,644	„ 1,98,749	„ 1,64,387	„ 1,36,755	„ 1,16,975	„ 65,324	„ 73,162	„ 56,800
„ „ do. do. 7½ lbs. do. ...	„ 72,739	„ 2,21,380	„ 94,551	„ 2,20,012	„ 2,03,547	„ 1,73,723	„ 1,04,626	„ 88,196	„ 91,745	„ 86,247
„ „ do. do. 8¼ lbs. do. ...	„ 4,87,822	„ 4,22,943	„ 2,65,195	„ 5,16,632	„ 6,23,056	„ 7,97,166	„ 3,61,514	„ 5,47,143	„ 4,31,428	„ 5,41,280
„ „ do. do. 9 lbs. do. ...	„ 91,207	„ 1,73,177	„ 1,03,791	„ 1,42,860	„ 1,80,306	„ 2,50,113	„ 88,968	„ 1,53,624	„ 2,46,386	„ 2,32,233
„ „ do. do. above 9 lbs.	„ 94,264	„ 73,246	„ 1,25,327	„ 1,26,773	„ 1,09,057	„ 1,82,570	„ 80,638	„ 75,154	„ 87,057	„ 1,01,187
40/5 „ do. do. 6 lbs. & under ...	„	„	„	„	„	„	„	„ 150	„	„ 1,200
„ „ do. do. 7 lbs. do. ...	„ 12,332	„ 2,471	„ 659	„	„ 836	„	„ 1,097	„ 5,196	„ 3,978	„ 76,183
„ „ do. do. 8 lbs. do. ...	„ 2,68,205	„ 2,49,805	„ 1,79,933	„ 2,40,769	„ 2,05,787	„ 2,07,727	„ 2,14,494	„ 2,13,340	„ 1,97,725	„ 1,85,002
„ „ do. do. 9 lbs. do. ...	„ 2,00,875	„ 1,89,623	„ 1,16,073	„ 1,62,045	„ 1,32,565	„ 2,09,156	„ 1,90,600	„ 2,62,940	„ 1,95,422	„ 1,70,924
„ „ do. do. above 9 lbs.	„ 3,99,545	„ 3,21,020	„ 2,60,557	„ 2,81,002	„ 3,97,547	„ 4,07,316	„ 1,89,229	„ 4,00,422	„ 3,99,897	„ 3,48,704
46/49 „ do. do. all weights ...	„ 4,38,517	„ 3,65,656	„ 3,11,074	„ 3,31,244	„ 3,70,956	„ 4,22,409	„ 2,03,655	„ 2,51,397	„ 1,90,369	„ 1,89,493
50/52 „ do. do. do. ...	„ 1,16,712	„ 84,269	„ 65,167	„ 1,07,337	„ 1,02,413	„ 1,13,286	„ 58,163	„ 81,625	„ 61,739	„ 85,236
53/60 „ do. do. do. ...	„ 58,426	„ 55,401	„ 55,455	„ 47,866	„ 51,575	„ 91,691	„ 70,345	„ 73,892	„ 91,002	„ 88,952
All widths × 23/24 yds. T. Cloths 4 lbs. & under ...	„ 888	„ 537	„	„	„	„	„	„	„	„ .....
„ do. do. 5 lbs. do. ...	„	„ 46	„	„	„ 200	„ 100	„	„ 200	„	„ .....
„ do. do. 6 lbs. do. ...	„ 1,930	„ 5,264	„ 779	„ 279	„ 502	„ 2,711	„	„ 1	„ 589	„ 297
„ do. do. 7 lbs. do. ...	„ 2,08,118	„ 2,65,484	„ 1,36,508	„ 1,42,027	„ 1,70,264	„ 1,79,453	„ 1,33,575	„ 2,79,014	„ 1,40,624	„ 1,75,130
„ do. do. above 7 lbs.	„ 19,359	„ 46,156	„ 41,606	„ 28,109	„ 30,199	„ 25,827	„ 11,510	„ 16,009	„ 1,410	„ 15,447
29 in. & under × 22/24 yds. Madapollams 2½ lbs. & under.	„ 2,12,342	„ 49,978	„ 20,033	„ 29,487	„ 46,957	„ 21,948	„ 20,677	„ 76,020	„ 21,135	„ 38,662
„ do. do. 2¾ lbs. & over.	„ 70,628	„ 43,710	„ 29,355	„ 51,825	„ 61,107	„ 42,953	„ 27,355	„ 81,827	„ 19,226	„ 21,201
30/32 in. do. do. 2½ lbs. & under.	„ 14,577	„ 1,950	„	„ 3,647	„	„	„ 3,999	„	„	„ .....
„ do. do. 2¾ lbs. & over.	„ 2,27,388	„ 83,949	„ 39,473	„ 29,943	„ 30,275	„ 25,740	„ 13,647	„ 18,015	„ 15,231	„ 17,366
38/42 in. do. do. 3 to 4¼ lbs. ...	„ 1,30,060	„ 54,640	„ 16,422	„ 43,161	„ 15,784	„ 4,020	„ 7,976	„ 92,661	„ 22,228	„ 417
43 in. & over do. do. 4½ to 6¼ lbs. ...	„ 4,17,354	„ 1,85,136	„ 1,12,756	„ 1,48,344	„ 2,17,568	„ 1,94,602	„ 1,78,886	„ 2,49,440	„ 1,29,379	„ 44,975
18/24 in. × 28/30 yds.* Printers 2 to 3 lbs.	„ 3,66,637	„ 1,44,056	„ 14,206	„ 18,065	„ 58,316	„ 61,238	„ 5,701	„ 39,147	„ 5,085	„ 4,069
Above 24 in. × do. do. above 3 lbs.	„ 18,127	„ 37,106	„ 31,376	„ 22,450	„ 16,103	„ 14,306	„	„ 4,410	„ 11,624	„ 1,250
34 to 45 in. × 18 20 yds. Jacconets, all weights	„ 13,08,222	„ 7,14,810	„ 5,95,975	„ 5,79,630	„ 5,62,372	„ 5,65,623	„ 2,98,347	„ 6,86,642	„ 2,49,179	„ 3,26,575
44 in. × 22 yds. do. do.	„ 5,00,241	„ 3,21,674	„ 2,92,669	„ 4,47,745	„ 3,58,723	„ 3,69,167	„ 3,94,145	„ 4,48,521	„ 3,16,021	„ 4,67,847
Above 44 in. × 22 yds. do. do.	„ 4,73,279	„ 4,16,377	„ 4,15,486	„ 3,80,447	„ 5,26,500	„ 3,89,181	„ 4,60,181	„ 3,73,994	„ 4,54,723	„ 4,90,030
36/9 in. × 18 to 22 yds. Mulls do.	„ 8,50,243	„ 3,42,753	„ 2,40,674	„ 4,06,852	„ 4,65,478	„ 3,68,803	„ 5,10,841	„ 5,87,191	„ 3,23,519	„ 5,27,454
40/42 in. × 19/20 yds. do do	„ 2,50,151	„ 1,92,140	„ 1,60,556	„ 2,34,099	„ 1,50,314	„ 1,03,585	„ 1,69,994	„ 1,82,376	„ 79,112	„ 1,03,327
Above 43 in. × 19/20 yds. do. do.	„ 71,712	„ 71,563	„ 45,480	„ 61,369	„ 22,982	„ 15,991	„ 55,555	„ 63,386	„ 21,918	„ 22,049
Domestics	„ 349	„ 478	„	„	„	„	„	„	„	„ .....
Longcloths	„ 1,697	„ 388	„	„	„	„	„	„	„	„ .....
Twills and Drills	„ 3,39,873	„ 2,86,789	„ 3,51,470	„ 3,28,264	„ 3,39,317	„ 4,01,156	„ 3,37,218	„ 3,67,714	„ 2,98,942	„ 3,39,770
Dimities or Spots	„	„ 167	„	„	„	„	„	„	„	„ .....
Chudders	„ 2,414	„ 2,171	„	„	„	„	„	„	„	„ .....
Total for 12 Months	Ps. 99,25,833	Ps. 70,93,150	Ps. 56,52,882	Ps. 61,62,341	Ps. 66,36,981	Ps. 67,72,681	Ps. 50,02,998	Ps. 66,69,655	Ps. 47,26,439	Ps. 54,54,263

* Printers of 60 yds. are entered in the equivalent of 30-yd. pieces, and similarly with T. Cloths of 48, 72 and 96 yards.

DESCRIPTION OF GOODS.	From 1st Jan. to 31st Dec. 1894.	From 1st Jan. to 31st Dec. 1895.	From 1st Jan. to 31st Dec. 1896.	From 1st Jan. to 31st Dec. 1897.	From 1st Jan. to 31st Dec. 1898.	From 1st Jan. to 31st Dec. 1899.	From 1st Jan. to 31st Dec. 1900.	From 1st Jan. to 31st Dec. 1901.	From 1st Jan. to 31st Dec. 1902.	From 1st Jan. to 31st Dec. 1903.
WHITE GOODS.										
28/36 in. × 39/42 yds. Shirtings and Longcloths	Pcs. 6,01,797	Pcs. 4,84,245	Pcs. 7,03,249	Pcs. 4,51,298	Pcs. 5,35,152	Pcs. 6,66,078	Pcs. 5,18,993	Pcs. 8,90,909	Pcs. 5,65,083	Pcs. 6,65,771
28/39 in. × 18/20 yds. Jacconets	„ 10,88,567	„ 4,91,891	} „ 6,15,049	„ 4,28,556	„ 5,28,703	„ 3,43,240	„ 2,52,772	„ 5,17,724	„ 1,79,628	„ 1,24,817
40 in. & wider „ do.	„ 1,03,140	„ 39,271	}							
26/39 in. × „ Mulls and Nainsooks	„ 45,59,694	„ 34,88,001	„ 37,77,257	„ 39,97,687	„ 48,29,693	„ 47,18,140	„ 42,49,615	„ 51,10,352	„ 37,90,090	„ 46,03,488
40/45 in. × „ do. do.	„ 5,94,947	„ 3,77,604	„ 4,91,478	„ 5,98,200	„ 7,53,189	„ 10,21,754	„ 10,71,745	„ 14,79,168	„ 8,36,093	„ 5,14,282
46 in. and upwards do. do.	„ 7,45,468	„ 6,04,937	„ 8,34,631	„ 7,10,017	„ 8,54,263	„ 9,06,600	„ 8,49,067	„ 12,47,332	„ 9,74,576	„ 7,63,333
32 to 42 in. × 12 to 18 yds. Cambrics	„ 31,263	„ 20,951	„ 15,906	„ 10,395	„ 5,834	„ 6,936	„ 2,648	„ 17,841	„ 20,466	„ 8,197
Twills and Drills	„ 41,987	„ 39,498	„ 70,657	„ 34,710	„ 46,324	„ 56,820	„ 72,178	„ 1,22,154	„ 48,147	„ 66,495
Total for 12 months ...	Ps. 77,66,863	Ps. 55,46,398	Ps. 65,08,227	Ps. 62,30,863	Ps. 75,53,158	Ps. 77,19,568	Ps. 70,17,018	Ps. 93,85,480	Ps. 64,14,083	Ps. 67,46,383
TURKEY RED GOODS.										
24 in. × 28 yds. Cambrics	Pcs. 5,36,977	Pcs. 2,98,312	Pcs. 3,30,750	Pcs. 1,96,536	Pcs. 3,42,264	Pcs. 6,36,650	Pcs. 2,38,797	Pcs. 2,49,783	Pcs. 3,23,222	Pcs. 3,15,749
32 in. × 24 yds. do.	„ 29,765	„ 13,762	„ 28,326	„ 12,830	„ 19,593	„ 5,567	„ 4,469	„ 8,081	„ 5,971	„ 6,462
All Widths and Lengths Shirtings	„ 2,78,596	„ 2,33,360	„ 2,67,750	„ 1,45,577	„ 2,02,246	„ 4,22,816	„ 1,34,765	„ 2,75,846	„ 2,66,151	„ 2,59,747
30 in. and over × 19/20 yds. Mulls	„ 72,500	„ 60,693	„ 93,006	„ 25,677	„ 27,839	„ 63,267	„ 22,737	„ 59,484	„ 29,209	„ 18,421
Do. do. Jacconets	„ 35,146	„ 14,187	„ 21,678	„ 12,990	„ 17,128	„ 13,121	„ 4,043	„ 8,271	„ 15,719	„ 6,041
All widths and lengths, Twills and Dimities	„ 44,939	„ 59,024	„ 37,145	„ 25,101	„ 19,137	„ 26,759	„ 15,607	„ 29,971	„ 17,938	„ 18,326
33/39 in. × 9/12 yds. Lappets	„ 12,429	„ 7,683	„ 10,210	„ 14,190	„ 4,075	„ 2,590	„ 731	„ 1,761	„	„ 1,704
30 in. and over × 19/20 yds. Mull Stripes	„ 12,138	„ 12,091	„ 7,579	„ 2,396	„ 4,837	„ 4,283	„ 5,483	„ 1,700	„ 1,680	„ 892
All widths and lengths, Prints and Chintz	„ 4,52,980	„ 2,50,924	„ 3,05,339	„ 2,48,178	„ 6,26,193	„ 6,68,042	„ 3,79,964	„ 3,72,526	„ 6,51,843	„ 5,08,042
30 in. & over × 20 yds. Printed Jacconets	„ 1,04,221	„ 1,11,657	„ 1,58,856	„ 1,04,619	„ 1,35,463	„ 1,84,673	„ 90,988	„ 1,99,009	„ 1,49,168	„ 2,04,956
Scarfs and Sarries	„ 7,40,603	„ 8,40,895	„ 10,00,902	„ 3,84,721	„ 10,54,914	„ 13,35,883	„ 7,01,167	„ 7,04,926	„ 9,24,238	„ 11,31,078
Bandanas or Handkerchiefs ...	„ 1,03,409	„ 2,25,435	„ 1,96,977	„ 2,51,333	„ 3,70,075	„ 6,02,590	„ 3,16,242	„ 2,16,996	„ 2,36,159	„ 9,26,795
Total for 12 months ...	Ps. 24,23,703	Ps. 21,28,023	Ps. 24,58,518	Ps. 14,24,148	Ps. 28,23,764	Ps. 39,66,241	Ps. 19,14,993	Ps. 21,28,354	Ps. 26,11,298	Ps. 33,98,213
WOOLLENS.										
Army Cloth	Yds. 1,89,192	Yds. 1,87,721	Yds. 2,07,917	Yds. 96,586	Yds. 1,40,006	Yds. 2,58,859	Yds. 79,013	Yds. 2,24,213	Yds. 1,65,485	Yds. 2,03,022
Spanish Stripes or Ladies' Cloth	„ 7,76,868	„ 2,86,218	„ 2,14,504	„ 83,027	„ 1,70,105	„ 3,70,972	„ 1,26,698	„ 3,73,247	„ 1,62,519	„ 1,50,836
Flannels	„ 16,96,624	„ 20,15,024	„ 22,96,178	„ 11,77,910	„ 17,76,647	„ 22,19,994	„ 19,99,888	„ 34,81,908	„ 17,02,588	„ 18,57,278
Broad Cloth	„ 2,88,728	„ 1,82,683	„ 1,66,475	„ 70,023	„ 1,35,348	„ 1,93,842	„ 1,26,210	„ 2,33,655	„ 1,77,686	„ 1,60,048
Alpacca, Merino, Italian, &c.	„ 7,15,100	„ 7,63,892	„ 9,08,995	„ 4,93,283	„ 5,12,478	„ 4,60,876	„ 4,83,001	„ 8,88,739	„ 5,30,252	„ 7,70,072
Union Cloth	„ 2,46,863	„ 1,74,185	„ 1,59,757	„ 49,035	„ 56,289	„ 81,550	„ 57,247	„ 54,049	„ 30,758	„ 53,739
Long Ells	„ 41,455	„ 27,395	„ 3,840	„	„ 18,945	„ 3,360	„	„	„	„ .....
All other Sorts	„ 22,78,277	„ 27,20,062	„ 32,36,825	„ 15,25,720	„ 17,14,668	„ 34,11,375	„ 23,82,967	„ 37,23,077	„ 26,86,936	„ 42,28,511
Total for 12 months ...	Yds.62,33,107	Yds.63,57,180	Yds.71,94,491	Yds.34,95,584	Yds.45,24,486	Yds.70,00,828	Yds.52,55,024	Yds.89,78,888	Yds.54,56,224	Yds.74,23,506

DESCRIPTION OF GOODS.	From 1st Jan. to 31st Dec. 1894.	From 1st Jan. to 31st Dec. 1895.	From 1st Jan. to 31st Dec. 1896.	From 1st Jan. to 31st Dec. 1897.	From 1st Jan. to 31st Dec. 1898.	From 1st Jan. to 31st Dec. 1899.	From 1st Jan. to 31st Dec. 1900.	From 1st Jan. to 31st Dec. 1901.	From 1st Jan. to 31st Dec. 1902.	From 1st Jan. to 31st Dec. 1903.
FANCY GOODS.										
Dyed Shirtings	Pcs. 2,43,052	Pcs. 1,08,263	Pcs. 1,98,654	Pcs. 1,63,016	Pcs. 2,38,221	Pcs. 2,79,072	Pcs. 1,89,168	Pcs. 3,87,768	Pcs. 2,16,124	Pcs. 2,63,778
„ Madapollams or Cambrics	„ 2,22,629	„ 55,177	„ 1,09,408	„ 99,478	„ 1,28,294	„ 1,12,913	„ 53,683	„ 98,016	„ 73,811	„ 1,53,988
„ Jacconets	„ 68,883	„ 19,952	„ 23,870	„ 26,556	„ 9,751	„ 5,924	„ 4,609	„ 12,672	„ 11,748	„ 2,774
Prints and Chintz, all Widths and Lengths	„ 19,43,064	„ 10,19,678	„ 13,87,624	„ 7,91,893	„ 14,50,566	„ 18,10,791	„ 8,85,291	„ 15,29,044	„ 13,41,706	„ 14,63,975
Printed Muslins and Jacconets, all Widths and Lengths ...	„ 5,94,043	„ 2,84,270	„ 4,46,004	„ 72,818	„ 1,11,370	„ 1,77,121	„ 82,782	„ 1,85,951	„ 1,22,952	„ 2,06,264
Lappets, White	„ 1,63,281	„ 1,30,314	„ 1,21,675	„ 79,294	„ 76,289	„ 94,219	„ 73,625	„ 88,882	„ 1,19,070	„ 1,18,640
„ Coloured	„ 62,240	„ 63,902	„ 69,586	„ 41,868	„ 20,048	„ 23,220	„ 18,751	„ 37,247	„ 28,358	„ 24,859
Lappet and Lace Scarfs	„ 65,515	„ 33,341	„ 53,414	„ 22,265	„ 24,044	„ 63,388	„ 40,733	„ 21,182	„ 38,484	„ 60,543
Dhoties, Grey	„ 44,88,320	„ 30,44,779	„ 36,27,489	„ 30,94,888	„ 27,71,211	„ 36,73,588	„ 13,29,728	„ 31,75,470	„ 30,46,064	„ 16,58,936
„ Bleached	„ 6,06,542	„ 5,40,275	„ 5,40,165	„ 4,11,254	„ 4,43,666	„ 4,37,520	„ 5,04,471	„ 8,04,952	„ 3,32,250	„ 3,53,252
Scarfs and Sarries, Grey...	„ 2,97,786	„ 1,83,629	„ 2,97,059	„ 2,44,584	„ 1,69,086	„ 2,16,222	„ 1,12,639	„ 1,14,355	„ 2,07,459	„ 1,44,080
„ „ Bleached	„ 5,47,422	„ 3,91,391	„ 5,17,573	„ 2,69,829	„ 3,36,091	„ 5,21,703	„ 4,13,435	„ 3,45,777	„ 4,17,921	„ 4,03,169
„ „ Colored and Printed	„ 3,96,854	„ 4,26,902	„ 4,50,978	„ 5,39,368	„ 3,69,867	„ 6,89,986	„ 6,62,041	„ 9,33,055	„ 11,17,132	„ 12,46,646
Book Muslins	„ 1,69,803	„ 1,12,922	„ 3,31,310	„ 1,34,488	„ 1,11,528	„ 1,66,611	„ 3,45,924	„ 5,04,356	„ 1,75,445	„ 3,06,119
Gauze, Plain, Figured, Striped and Checked... ...	„ 3,29,603	„ 1,83,525	„ 4,75,366	„ 2,70,923	„ 1,73,342	„ 4,08,525	„ 2,20,784	„ 5,73,543	„ 2,75,827	„ 5,72,807
Doria and Mull Stripes	„ 13,97,040	„ 10,05,337	„ 11,45,682	„ 7,31,873	„ 5,43,535	„ 7,37,922	„ 3,99,639	„ 9,29,273	„ 6,06,042	„ 3,39,040
Cotton Ticks	„ 2,764	„ 5,184	„ 6,853	„ 1,614	„ 2,477	„ 4,526	„ 1,950	„ 3,689	„ 3,104	„ 6,166
Twills and Drills, Colored	„ 72,311	„ 58,284	„ 63,099	„ 61,437	„ 78,723	„ 1,09,659	„ 76,158	„ 1,00,415	„ 91,828	„ 1,14,232
Imitation Linen Dhoties and Sarries...	„ 46,732	„ 27,028	„ 59,449	„ 21,735	„ 27,620	„ 33,713	„ 45,356	„ 67,209	„ 38,095	„ 36,759
Embd. Muslins, Jacconets, and Scarfs (White) ...	„ 1,75,816	„ 69,236	„ 1,33,276	„ 1,09,591	„ 1,35,715	„ 1,63,157	„ 1,54,620	„ 1,61,244	„ 2,10,796	„ 1,71,105
89 in. × 12 yds. Nainsooks, Colored and Printed ...	„ 17,199	„ 12,103	„ 11,367	„ 12,624	„ 1,872	„ 3,505	„ 3,797	„ 4,051	„ 5,639	„ 1,947
Trouserings	„ 33,111	„ 39,362	„ 54,532	„ 22,139	„ 33,667	„ 57,760	„ 23,628	„ 36,432	„ 39,734	„ 69,869
Chequered Mulls	„ 13,784	„	„	„	„	„	„	„	„	„ .....
Harwards, Oxfords, Zephyrs, &c.	„ 30,364	„ 42,614	„ 51,334	„ 17,420	„ 26,140	„ 42,801	„ 26,361	„ 29,856	„ 31,946	„ 57,360
Satin	„ 78,484	„ 30,607	„ 80,903	„ 61,496	„ 51,770	„ 52,377	„ 47,785	„ 94,929	„ 55,649	„ 93,068
Coatings	„	„ 14,191	„ 32,341	„ 31,821	„ 43,588	„ 81,649	„ 34,901	„ 37,377	„ 30,144	„ 49,731
Italians	„	„	„ 34,946	„ 8,353	„ 28,573	„ 60,656	„ 33,555	„ 75,866	„ 34,583	„ 41,792
Dimities, Brocades or Brilliants	„ 53,087	„ 30,922	„ 89,312	„ 60,143	„ 57,994	„ 87,796	„ 61,206	„ 1,66,181	„ 79,263	„ 94,500
Total for 12 months ...	Ps.1,21,19,729	Ps. 79,33,188	Ps.1,04,12,769	Ps. 74,02,760	Ps. 74,65,053	Ps.1,01,16,224	Ps. 58,46,620	Ps.1,05,16,792	Ps. 87,51,174	Ps. 80,55,449
Flannels, cotton Total for 12 months ...	yds. * ...	yds. * ...	yds. * ...	yds. * ...	yds. * ...	yds. 83,59,803	yds. 39,35,533	yds. 42,52,682	yds. 27,09,853	yds. 36,72,982
Nets Do. ...	„ 17,53,199	„ 12,64,368	„ 18,48,229	„ 11,26,765	„ 11,27,697	„ 23,76,906	„ 17,73,409	„ 10,87,700	„ 14,84,050	„ 22,95,218
Handkerchiefs, White Do. ...	doz. 94,857	doz. 1,18,574	doz. 1,93,789	doz. 1,13,134	doz. 1,17,701	doz. 1,08,978	doz. 85,871	doz. 1,37,784	doz. 1,30,535	doz. 95,571
„ Printed Do. ...	„ 7,30,297	„ 7,30,226	„ 6,46,876	„ 3,16,254	„ 2,37,241	„ 6,67,134	„ 1,78,687	„ 2,62,142	„ 2,42,087	„ 2,15,479

* Not recorded.

Description of Goods.	From 1st Jan. to 31st Dec. 1894.	From 1st Jan. to 31st Dec. 1895.	From 1st Jan. to 31st Dec. 1896.	From 1st Jan. to 31st Dec. 1897.	From 1st Jan. to 31st Dec. 1898.	From 1st Jan. to 31st Dec. 1899.	From 1st Jan. to 31st Dec. 1900.	From 1st Jan. to 31st Dec. 1901.	From 1st Jan. to 31st Dec. 1902.	From 1st Jan. to 31st Dec. 1903.
YARNS.										
Grey Mule and Medio, 10/24's say 20's	lbs. 280	lbs. 900	lbs. 20,140	lbs. 2,005	lbs. 1,709	lbs. 19,987	lbs. 15,664	lbs. ...	lbs. 620	lbs. 2,260
" " 26/32's " 30's	" 6,52,005	" 7,83,400	" 7,67,318	" 10,77,722	" 19,21,416	" 17,03,508	" 6,82,505	" 8,17,599	" 7,20,761	" 97,918
" " 34/42's " 40's	" 9,84,490	" 13,65,527	" 17,54,984	" 12,11,967	" 14,02,827	" 18,86,137	" 3,97,230	" 9,05,630	" 8,30,974	" 8,49,787
" " 44/52's " 50's	" 5,60,289	" 6,59,523	" 8,14,011	" 4,95,792	" 3,20,475	" 4,93,046	" 2,44,513	" 4,12,505	" 3,32,799	" 3,18,385
" " 54/60's " 60's	" 3,96,712	" 2,82,903	" 5,80,556	" 3,59,817	" 2,06,502	" 3,00,510	" 3,34,411	" 3,22,639	" 2,09,438	" 2,00,731
" " above 60's	" 99,332	" 50,002	" 1,26,751	" 1,34,088	" 1,43,613	" 1,29,261	" 2,28,727	" 1,61,932	" 2,02,568	" 1,57,066
Grey Water and Mock, 16/24's say 20's	" 14,464	" 6,000	" 9,000	" 6,650	" 3,000	" 3,600	" 8,100	" 4,500	" 12,900	" 13,500
" " 26/32's " 30's	" 34,88,370	" 33,36,916	" 34,53,975	" 38,70,442	" 40,04,735	" 29,88,843	" 16,90,962	" 20,68,073	" 12,57,392	" 11,12,458
" " 40's	" 5,54,708	" 6,54,840	" 6,19,647	" 6,23,365	" 5,04,926	" 7,14,431	" 3,93,163	" 6,48,320	" 5,19,689	" 5,13,220
" " above 40's	" 9,561	" 8,308	" 33,100	" 26,763	" 6,600	" 27,758	" 63,027	" 23,056	" 25,600	" 11,700
Total for 12 months (Grey Yarns)... ...	lbs. 67,60,211	lbs. 71,48,319	lbs. 81,79,482	lbs. 78,08,611	lbs. 85,15,803	lbs. 82,67,081	lbs. 40,58,302	lbs. 53,64,254	lbs. 41,62,741	lbs. 32,77,025
Bleached ... ... Total for 12 months ...	lbs. 4,29,568	lbs. 5,00,767	lbs. 5,78,983	lbs. 4,26,951	lbs. 4,76,771	lbs. 4,99,549	lbs. 4,61,112	lbs. 7,34,656	lbs. 6,63,204	lbs. 6,78,381
Turkey Red	lbs. 19,70,988	lbs. 17,12,417	lbs. 18,61,219	lbs. 9,83,052	lbs. 12,06,649	lbs. 12,45,092	lbs. 6,07,437	lbs. 11,62,693	lbs. 8,50,286	lbs. 8,57,607
Orange and Yellow	" 10,26,640	" 7,52,471	" 6,33,261	" 5,06,761	" 4,25,306	" 3,50,680	" 2,33,904	" 4,00,375	" 3,42,601	" 3,14,790
Green	" 4,91,980	" 4,28,769	" 3,70,531	" 2,85,050	" 1,73,300	" 2,26,522	" 43,650	" 1,25,200	" 1,14,248	" 65,425
Other Colours	" 11,414	" 5,047	" 21,232	" 7,438	" 11,999	" 22,831	" 27,519	" 33,174	" 30,287	" 66,812
Total for 12 months (Coloured Yarns)...	lbs. 35,01,022	lbs. 28,98,704	lbs. 28,86,243	lbs. 17,82,301	lbs. 18,17,254	lbs. 18,45,125	lbs. 9,12,510	lbs. 17,31,442	lbs. 13,37,422	lbs. 13,04,634
Total all Yarns...	lbs. 1,06,90,801	lbs. 1,05,47,790	lbs. 1,16,44,708	lbs. 1,00,17,863	lbs. 1,08,09,828	lbs. 1,06,11,755	lbs. 54,31,924	lbs. 78,30,352	lbs. 61,63,367	lbs. 52,60,040
SUNDRY.										
Coals (from Europe and Australia). Total for 12 months...	Tons 5,53,964	Tons 5,75,249	Tons 4,10,722	Tons 1,26,698	Tons 1,97,942	Tons 3,11,632	Tons 58,631	Tons 83,824	Tons 1,81,641	Tons 1,24,723
Coke (from Europe). Do. ...	" 4,444	" 4,251	" 7,368	" 5,268	" 5,126	" 6,102	" 3,355	" 5,960	" 2,018	" 2,826
Coals (from Japan) Do. ...	" *	" 4,547	" 57,677	" 24,545	" 16,817	" 75,387	" 23,936	" 56,565	" 7,421	" * 11,022
" (from Calcutta) Do. ...	" *	" *	" 2,51,816	" 4,29,772	" 3,80,945	" 3,43,297	" 5,91,997	" 7,41,474	" 4,63,973	" * 6,60,654

* Not recorded.

EXPORTS OF INDIAN MANUFACTURED PIECE-GOODS AND YARNS,

BY STEAMERS, SHIPS, AND NATIVE CRAFT.

From 1st January to 31st December 1903.

As per Export General Manifests.

TO	Grey and White Piece-Goods.			Coloured Piece-Goods.		Total.		Twist.	
	Pckgs.	Yards.	lbs.	Pckgs.	Yards.	Pckgs.	Yards.	Bales.	Lbs.
CALCUTTA	14,048	1,92,78,293	54,25,550	3,686	44,53,763	17,734	2,37,32,056	28,059	1,11,95,200
MADRAS	14	19,600	6,900	...	...	14	19,600	67	22,650
MALABAR AND COROMANDEL COASTS (Calicut, Cochin, Tellicherry, Cannanore, Mangalore, Tuticorin, Beypore, Cocanada, Vizagapatam, &c.)	721	12,29,084	3,59,388	617	14,29,842	1,338	26,58,876	19,967	72,25,008
SCIND (Kurrachee)	37,607	7,57,74,839	1,70,88,939	5,554	1,01,58,846	43,161	8,59,33,685	11,660	43,85,725
KUTCH AND KATTYAWAR	827	17,68,733	4,54,855	57	1,10,584	884	18,79,317	7,627	27,72,089
BRITISH CONCAN & GUZERAT (Rutnagherry, Carwar, Vingorla, Compta, Hurnee, Caranja, Panwell, Malwan, Surat, Broach, &c.)	871	14,44,902	3,42,004	1,341	18,92,667	2,212	33,37,569	945	3,38,619
FOREIGN CONCAN (Jafferabad, Shreevurdhan, Rajpoori, Jambli, Coombharoo, &c.)	50	1,15,376	26,561	48	88,605	98	2,03,981	41	7,205
MARMAGOA, GOA, DAMAUN AND DIU	574	7,83,687	1,70,436	117	1,83,980	691	9,67,667	988	3,47,903
BRITISH BURMAH (Rangoon and Moulmein.)	2,720	37,68,723	12,22,584	3,567	48,81,551	6,287	86,50,274	11,337	39,38,592
CEYLON (Colombo and Galle)	111	2,71,410	1,06,600	136	4,65,691	247	7,37,101	110	36,500
CHINA (Hongkong)	57	68,161	17,481	1	240	58	68,401	2,61,810	10,47,19,620
CHINA (Shanghai)	80	99,680	25,832	...	...	80	99,680	3,42,284	13,68,93,600
CHINA (Hanoi, Tientsin, &c.)	.....	.....	.....	...	...	...	.....	.....	.....
JAPAN (Yokohama and Kobe)	.....	.....	.....	...	...	...	.....	.....	.....
STRAITS SETTLEMENTS (Penang and Singapore.)	770	13,40,308	3,69,351	1,091	19,87,255	1,861	33,27,563	12,855	47,47,365
PERSIA (Bushire, Abbas, Mahmorah, &c.)	495	7,59,762	2,11,967	229	2,72,358	724	10,32,120	4,650	17,64,710
ARABIA (Muscat, Hoodeida, Jeddah, &c.)	857	12,08,617	3,38,636	643	12,44,678	1,500	24,53,295	1,850	6,60,835
TURKEY IN ASIA (Smyrna, Beyrout, Bagdad, Bussorah, &c.)	1,602	29,57,875	7,70,278	146	2,13,840	1,748	31,71,715	10,224	39,93,740
MEKRAN AND SONMIANI (Vermalla, Gwadhur, &c.)	68	98,943	26,864	13	20,300	81	1,19,243	43	15,700
ADEN	6,199	87,68,369	23,60,229	1,703	30,90,486	7,902	1,18,58,855	4,783	17,81,815
AFRICA (Mauritius and Sychelles)	96	1,70,663	49,989	182	3,18,583	278	4,89,246	.....	.....
AFRICA (Zanzibar)	8,647	93,72,648	24,10,606	492	6,03,656	9,139	99,76,304	375	1,25,244
AFRICA (Mozambique)	5,374	67,77,435	14,16,231	344	4,47,057	5,718	72,24,492	3	1,000
ABYSSINIA (Massowa)	2,115	29,73,105	6,58,623	66	1,26,995	2,181	31 00,100	179	67,900
AFRICA (Suakim)	762	12,73,916	3,01,407	84	1,91,733	846	14,65,649	3	1,000
AFRICA (Egypt)	.....	.....	.....	3	1,600	3	1,600	2,194	8,60,860
AFRICA (Natal)	1,361	14,95,975	3,08,990	89	81,960	1,450	15,77,935	...	.....
AFRICA (Hullulla, Beira, &c.)	120	1,39,703	35,762	30	33,588	150	1,73,291	...	.....
AFRICA (Madagascar)	9	7,600	3,950	11	14,650	20	22,250	...	.....
SUMATRA (Padang)	.....	.....	.....	...	...	...	.....	35	11,600
JAVA (Batavia, Cheribon, &c.)	.....	.....	.....	1	1,440	1	1,440	769	1,17,595
SIAM (Bangkok)	663	10,53,954	2,78,447	33	71,120	696	11,25,074	213	70,500
LACADIVES AND MALDIVES	.....	.....	.....	...	...	...	.....	...	.....
EAST INDIAN & PHILIPPINE ISLANDS. (Manila, Maccasar, &c.)	3	3,030	1,019	1	540	4	3,570	530	1,06,000
EUROPE	17	29,738	8,965	53	45,713	70	75,451	1,787	7,11,482
NEW ZEALAND	.....	.....	.....	...	...	...	.....	...	.....
AUSTRALIA	.....	.....	.....	2	3,200	2	3,200	...	.....
AMERICA	.....	.....	.....	...	...	...	.....	...	.....
Total Exports from 1st January to 31st December 1903	86,838	14,30,54,079	3,47,98,444	20,340	3,24,36,521	1,07,178	17,54,90,600	7,25,338	28,69,20,007
Exported same time 1902	89,216	14,12,52,169	3,49,07,243	15,944	2,46,06,384	1,05,160	16,58,58,553	6,74,450	26,66,98,930
Do. do. 1901	84,525	13,63,00,064	3,35,85,159	12,623	1,99,63,669	97,148	15,62,63,733	6,42,032	25,48,17,562
Do. do. 1900	74,415	11,69,55,481	2,81,68,912	9,516	1,56,02,237	83,931	13,25,57,718	3,46,503	13,65,71,588
Do. do. 1899	84,238	12,28,07,108	2,98,19,677	8,513	1,28,42,538	92,751	13,56,49,646	6,81,039	26,95,59,281
Do do. 1898	69,026	9,92,68,706	2,47,63,678	6,177	90,72,326	75,203	10,83,41,032	5,53,681	21,87,24,607
Do. do. 1897	69,718	10,11,26,083	2,51,62,666	5,619	84,22,451	75,337	10,95,48,534	4,61,260	18,11,84,351
Do. do. 1896	87,364	12,29,74,132	3,15,20,976	6,411	98,54,183	93,775	13,28,28,315	5,84,599	22,98,46,959
Do. do. 1895	92,353	12,84,63,625	3,17,23,691	5,726	88,09,449	98,079	13,72,73,074	4,96,421	19,26,02,163
Do. do. 1894	82,151	11,89,60,215	2,91,05,588	4,057	63,60,875	86,208	12,53,21,090	4,68,995	18,21,28,551

EXPORTS OF EUROPE MANUFACTURED PIECE-GOODS AND YARNS, BY STEAMERS, SHIPS, AND NATIVE CRAFT.

From 1st January to 31st December 1903.

As per Export General Manifests.

TO	Piece-Goods.								Total.		Twist.	
	Grey.		White.		Colored and Printed.		Country Dyed.					
	Pckgs.	Yards.	Pckgs.	Yards.	Pckgs.	Yards.	Pckgs.	Yards.	Pckgs.	Yards.	Pckgs.	Lbs.
Calcutta	775	16,04,073	145	3,40,021	139	3,85,604	7	12,000	1,066	23,41,698	27	10 800
Madras	29	41,660	...	.....	6	16,527	...	.....	35	58,187	11	3,275
Malabar and Coromandel Coasts (Calicut, Cochin, Tellicherry, Cannanore, Mangalore, Tuticorin, Beypore, Cocanada, Vizagapatam, &c.)	6,771	1,48,14,468	1,952	52,93,421	748	18,84,249	5	7,978	9,471	2,20,00,111	241	80,993
Scind (Kurrachee)	7,743	1,56,44,545	15,895	4,21,71,108	5,601	1,48,09,488	6	25,231	29,245	7,26,50,372	425	1,36,150
Kutch and Kattyawar	5,114	1,27,50,224	889	24,64,973	1,922	50,32,668	5	13,495	7,930	2,02,61,360	142	42,140
British Concan & Guzerat (Rutnagherry, Carwar, Vingorla, Compta, Hurnee, Caranja, Panwell, Malwan, Surat, Broach, &c.)	1,467	29,38,020	133	2,60,107	361	7,57,753	...	.....	1,961	39,55,880	193	53,650
Foreign Concan (Jafferabad, Shreevurdhan, Rajpoori, Jambli, Coombharoo, &c.)	50	1,00,498	5	16,662	17	35,544	...	.....	72	1,52,704	...	.....
Marmagoa, Goa, Damaun, and Diu	456	9,03,660	100	1,64,168	319	5,77,252	165	1,35,565	1,040	17,80,645	645	1,88,370
British Burmah (Rangoon and Moulmein.)	1,300	22,06,350	363	8,40,580	607	12,11,983	48	95,023	2,318	43,53,936	...	.....
Ceylon (Colombo and Galle.)	106	1,92,573	304	10,48,362	334	8,63,361	32	47,600	776	21,51,896	15	4,450
China (Hongkong)	2	1,620	13	18,093	27	33,032	...	.....	42	52,745	...	.....
China (Shanghai)	...	.....	1	500	13	13,616	...	.....	14	14,116	...	.....
China (Hanoi, Amoy, Tientsin, &c.)	...	.....	...	.....	7	7,063	6	23,100	13	30,163	...	.....
Japan (Yokohama and Kobe.)	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....
Straits Settlements (Penang and Singapore.)	18	31,775	361	8,55,799	250	5,45,310	1,625	31,72,230	2,254	46,05,114	1	300
Persia (Bushire, Abbas, Mahmorah, &c.)	1,763	37,54,292	651	15,59,977	1,300	24,63,631	5,795	80,33,340	9,509	1,58,11,240	2,448	6,89,710
Arabia (Muscat, Hoodeida, Jeddah, &c.)	562	10,83,469	933	23,63,724	1,014	24,61,306	2,947	85,85,203	5,456	1,44,93,702	196	66,675
Turkey in Asia (Smyrna, Beyrout, Bagdad, Bussorah, &c.)	150	2,91,305	42	1,01,127	101	1,91,747	1,674	18,54,526	1,967	24,38,705	40	12,000
Mekran and Sonmiani (Vermalla, Gwadhur, &c.)	1	7,510	7	15,100	12	19,860	5	17,920	25	60,390	5	1,400
Aden	137	3,07,202	646	16,95,690	571	13,80,979	586	17,67,727	1,940	51,51,598	189	57,300
Africa (Mauritius, &c.)	335	6,15,803	81	1,54,179	325	6,68,331	72	1,45,589	813	15,83,852	...	.....
Africa (Madagascar)	1	1,600	9	15,840	...	.....	3	7,800	13	25,240	...	.....
Africa (Zanzibar)	263	4,28,820	431	9,86,334	480	10,23,005	2,362	30,93,705	3,536	55,31,864	61	18,700
Africa (Mozambique)	127	1,94,855	121	2,12,171	260	6,83,964	2,057	25,43,984	2,565	36,39,974	...	.....
Abyssinia (Massowa)	17	32,255	17	46,991	17	44,295	3	15,444	54	1,38,985	35	10,500
Africa (Suakim)	34	71,423	9	20,450	8	2,300	8	25,750	54	1,19,923	...	.....
Africa (Egypt)	...	.....	2	1,700	2	4,952	...	.....	4	6,652	...	.....
Africa (Natal)	73	1,49,110	25	50,078	111	3,34,898	116	1,24,010	325	6,58,096	...	.....
Africa (Hullulla, Beira, &c.)	51	1,11,339	69	1,22,826	56	1,41 292	47	55,461	223	4,30,918	...	.....
Siam (Bangkok)	2	3,599	123	3,46,604	41	1,02,102	172	3,73,700	338	8,26,005	4	1,600
East Indian and Philippine Islands (Manila, Maccasar, &c.)	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....
Sumatra (Padang)	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....
Java (Batavia, Cheribon, &c.)	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....
Australia (Melbourne, Sydney, &c.)	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....
Europe	2	685	34	49,407	21	62,172	...	.....	57	1,12,264	2	310
Batoum	...	.....	10	29,700	...	.....	...	.....	10	29,700	...	.....
Borneo	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....
America	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....
Total Exports from 1st January to 31st December 1903	27,349	5,82,82,733	23,371	6,12,45,692	14,660	3,57,63,284	17,746	3,01,76,326	83,126	18,54,68,035	4,680	13,78,323
Exported same time 1902	26,314	5,51,38,594	19,757	5,16,64,073	13,088	3,12,00,180	15,619	2,63,46,441	74,778	16,43,49,238	8,182	23,91,416
Do. do. 1901	28,462	5,85,51,551	22,240	5,93,59,905	13,410	3,29,84,648	21,146	3,22,90,294	85,248	18,31,86,993	8,064	26,73,641
Do. do. 1900	27,688	5,53,43,428	19,580	5,13,68,885	13,872	3,31,94,103	17,215	2,74,64,428	78,100	16,73,65,839	9,757	28,84,984
Do. do. 1899	34,887	7,05,60,675	22,610	5,98,08,127	15,127	3,44,42,885	21,402	3,37,70,400	94 026	19,85,82,091	13,161	40,20,855
Do. do. 1898	31,802	6,55,18,568	21,705	5,67,77,832	12,197	2,96,36,138	20,081	3,23,21,190	85,785	18,42,53,728	6,923	21,22,131
Do. do. 1897	30,478	6,50,44,122	18,695	5,09,02,275	11,663	2,89,44,776	20,511	3,31,96,258	81,342	17,80,90,431	7,549	23,09,651
Do. do. 1896	31,144	6,86,89,759	20,842	5,68,82,781	16,263	4,21,98,286	19,888	3,42,23,289	88,137	20,19,94,015	8,991	27,64,643
Do. do. 1895	36,793	7,91,77,054	19,170	5,36,58,345	19,762	5,10,95,577	28,544	4,33,16,540	1,03,269	22,72,47,522	11,074	33,32,649
Do. do. 1894	38,539	8,65,64,488	20,324	5,50,32,788	19,026	4,84,36,921	22,961	3,65,18,248	1,00,850	22,65,52,395	12,903	38,94,337

EXPORTS OF INDIAN MANUFACTURED PIECE-GOODS AND YARNS BY RAILWAYS.

From 1st January to 31st December 1903.

G. I. P. RAILWAY, NORTH-EAST LINE.

STATIONS TO	Country Piece-Goods.		Country Twist.		Remarks.
	Packages.	Indian Maunds.	Packages.	Indian Maunds.	
TITWALA TO KASARA ...	...	...	...	...	
IGATPURI	...	...	...	...	
DEOLALI	1	4	2	2	
GHOTI	...	...	...	...	
NASIK ROAD	2	7	14	25	
KHERWARI	1	7	1	2	
NIPHAD	1	6	...	...	
LASALGAON	2	3	...	...	
MUNMAR	1	3	202	597	
NANDGAON	...	...	1	2	
CHALISGAON	...	...	...	...	
KAJGAON	...	...	2	4	
PACHORA	...	...	...	...	
MAHEJI	...	...	...	...	
MHASAWAD	...	...	...	...	
JALGAON	17	97	4	20	
BHADLI	...	...	...	...	
BHUSAWAL	1	2	...	...	
NADGAON	...	...	...	...	
MALKAPUR	...	...	2	9	
NANDURA	1	2	...	...	
SHEGAON	2	8	...	...	
KHAMGAON	5	30	...	...	
PARAS	1	6	5	18	
AKOLA	150	785	3	6	
MURTIZAPUR	20	83	...	...	
AMRAOTI	10	58	1	4	
CHANDUR	...	...	...	...	
DHAMANGAON	16	55	...	...	
PULGAON	1	2	...	...	
WARDHA	...	...	...	...	
SONEGAON *	...	...	...	...	
HINGANGHAT *...	4	17	...	...	
WARORA *...	7	32	16	70	
SINDI	...	...	...	...	
NAGPUR	18	75	202	787	
OTHER STATIONS BETWEEN TITWALA AND NAGPUR ...	3	13	23	91	
SAUDA	3	14	23	72	
RAWER	...	...	...	...	
BURHANPUR	7	32	57	212	
DONGARGAON	...	...	1	5	
KHANDWA	11	59	88	410	
KHIRKIAN	...	...	...	...	
HARDA	1	6	4	20	
TIMARNI	...	...	...	...	
SIONI	...	...	...	...	
ITARSI	1	4	...	...	
SOHAGPUR	...	...	...	...	
PIPARIA	1	10	...	...	
BANKHERI	...	...	1	5	
GADARWARA	3	19	...	...	
KARELI	...	...	3	12	
NURSINGHPUR	...	...	...	...	
CHINDWARA	...	...	...	...	
JABALPUR	41	203	39	182	
OTHER STATIONS BETWEEN SAUDA AND JABALPUR ...	1	6	4	7	
TOTAL EXPORTS, N.-E. LINE	333	1,648	698	2,562	

* Wardha Coal State Railway.

G. I. P. RAILWAY, SOUTH-EAST LINE.

STATIONS TO	Country Piece-Goods.		Country Twist.		Remarks.
	Pckgs.	Indian Maunds.	Pckgs.	Indian Maunds.	
THANA AND KALYAN	...	...	5	14	
NERAL	...	...	...	...	
LANAULI	...	...	...	...	
KARJAT	...	...	...	...	
TALEGAON	1	7	...	...	
CHINCHWAD	...	...	...	...	
KIRKEE	...	...	...	...	
POONA	59	268	93	364	
KHEDGAON	1	4	...	...	
DIKSAL	4	23	...	...	
JEUR	5	29	...	...	
KEM	...	...	...	...	
BARSI ROAD	10	47	19	80	
BARSI TOWN†	...	...	...	...	
MADHA	5	13	...	...	
SHOLAPUR	4	14	...	...	
GULBARGA	12	75	...	...	
YADAGIRI	1	3	1	5	
SAIDAPUR ROAD	...	...	...	...	
RAICHUR	...	...	...	...	
OTHER STATIONS BETWEEN THANA AND RAICHUR ...	2	6	...	...	
TOTAL EXPORTS, S.-E. LINE.	104	489	118	463	
GRAND TOTAL...	437	2,137	816	3,025	
TOTAL EXPORTS FOR 1903...	437	2,137	816	3,025	
Do. do. 1902...	459	2,111	379	1,355	
Do. do. 1901...	331	1,569	374	1,246	
Do. do. 1900...	330	1,429	457	1,154	
Do. do. 1899...	692	2,912	1,828	5,108	
Do. do. 1898...	1,057	4,242	5,165	8,185	
Do. do. 1897...	670	2,998	4,807	7,836	
Do. do. 1896...	778	3,704	2,428	5,952	
Do. do. 1895 ..	1,163	5,257	5,212	7,090	
Do. do. 1894...	3,979	20,997	6,990	13,441	

TO STATIONS ON THE BENGAL-NAGPUR RAILWAY AND ITS CONNECTIONS.

TAMSAR ROAD	1	7	...	...
KAMPTEE	10	64	2	9
BELASPUR	...	...	...	...
GONDIA	...	...	8	35
DONGARGARH	3	15	...	...
RAJ-NANDGAON	...	...	...	...
DRUG	...	...	...	...
RAIPUR	...	...	...	...
BHATAPARA	...	...	...	...
RAIGARH	...	...	...	...
CHAMPA	...	...	...	...
AKALTARA	...	...	...	...
JHARSUGUDA	...	...	24	98
CALCUTTA	24	99	...	...
ARMENIAN GHAT	395	1,705	295	1,446
SHALIMAR	27	158	15	76
OTHER STATIONS	3	9	13	58
TOTAL EXPORTS FOR 1903...	463	2,057	357	1,722
Do. do. 1902...	602	2,289	486	2,503
Do. do. 1901...	157	687	44	114
Do. do. 1900...	45	173	30	110
Do. do. 1899...	111	489	207	798
Do. do. 1898...	161	633	1,076	4,434
Do. do. 1897...	31	110	86	245
Do. do. 1896...	69	262	79	264
Do. do. 1895...	174	631	109	475
Do. do. 1894...	525	1,850	182	787

† Barsi Light Railway.

TO STATIONS ON THE INDIAN MIDLAND RAILWAY AND ITS CONNECTIONS.

STATIONS.	Country Piece-Goods.		Country Twist.		Remarks.
	Pckgs.	Indian Maunds.	Pckgs.	Indian Maunds.	
HOSHANGABAD	...	...	...	...	
BHOPAL	8	53	...	...	
BHILSA	1	3	...	...	
BASODA	...	...	...	...	
BAMORA	...	...	...	...	
BINA...	...	...	...	...	
LALITPUR	...	...	...	...	
TALBAHAT	...	...	...	...	
JHANSI	...	...	...	...	
AGRA FORT	6	27	...	...	
GWALIOR	...	...	...	...	
KHORAI	...	...	...	...	
SAUGOR	1	3	...	...	
LUCKNOW...	...	...	...	...	
NANPARA	...	...	...	...	
BAHRAICH	...	...	...	...	
CALCUTTA	...	...	...	...	
CAWNPORE (VIA ITARSI) ...	277	1,375	76	392	
BARABANKI	...	...	...	...	
MORAR ROAD	...	...	...	...	
MAURANIPUR	...	...	...	...	
SUMER	...	...	...	...	
KUTNI-MARWARA	15	86	...	...	
LAKHIMPUR	...	...	...	...	
MANIKPUR	...	...	...	...	
TICOMGARH	...	...	...	...	
NOWGONG...	...	...	...	...	
DAMOH	...	...	...	...	
SEHORE	...	...	...	...	
GARAKOTA	...	...	...	...	
SUTNA	12	64	...	...	
GUNA	...	...	...	...	
OTHER STATIONS	25	110	1	2	
TOTAL EXPORTS FOR 1903...	345	1,721	77	394	
Do. do. 1902...	804	3,887	89	403	
Do. do. 1901...	1,183	6,561	445	1,870	
Do. do. 1900...	1,842	9,755	441	1,211	
Do. do. 1899...	4,016	20,580	288	733	
Do. do. 1898...	6,016	30,092	774	2,376	
Do. do. 1897...	4,072	19,868	466	1,050	
Do. do. 1896...	3,167	16,382	177	501	
Do. do. 1895...	3,780	19,292	159	627	
Do. do. 1894...	5,365	26,664	1,583	7,463	

TO STATIONS ON THE MADRAS RAILWAY AND ITS CONNECTIONS.

ADONI	...	...	48	176
CUDDAPAH	1	13	...	...
MADRAS	647	3,462	1,378	5,449
METTUPALAIYAM	1	1	...	...
TADPATRI	...	...	...	...
BANGALORE	...	...	...	...
OTHER STATIONS	8	49	1	1
TOTAL EXPORTS FOR 1903...	657	3,525	1,427	5,636
Do. do. 1902...	1,461	7,779	2,436	9,911
Do. do. 1901...	1,822	9,249	2,198	9,635
Do. do. 1900...	790	4,186	153	851
Do. do. 1899...	318	1,674	151	842
Do. do. 1898...	91	442	81	314
Do. do. 1897...	180	775	48	211
Do. do. 1896...	248	1,220	47	231
Do. do. 1895...	46	204	43	185
Do. do. 1894...	43	205	42	120

TO STATIONS ON THE DHOND AND MUNMAD STATE RAILWAY.

STATIONS.	Country Piece-Goods.		Country Twist.		Remarks.
	Packages.	Indian Maunds.	Packages.	Indian Maunds.	
PIMPRI	...	...	...	...	
AHMEDNAGAR	1	5	2	10	
VAMBORI	...	...	1	5	
RAHURI	1	7	...	...	
BELAPUR	...	...	...	...	
CHITALI	...	...	...	...	
PUNTAMBA	...	...	...	...	
YEOLA	2	9	...	...	
OTHER STATIONS	...	...	...	...	
TOTAL EXPORTS FOR 1903 ...	4	21	3	15	
Do. do. 1902 ...	14	62	33	113	
Do. do. 1901 ...	7	23	24	90	
Do. do. 1900 ...	30	141	16	61	
Do. do. 1899 ...	31	100	23	43	
Do. do. 1898 ...	32	154	45	77	
Do. do. 1897 ...	57	188	36	99	
Do. do. 1896 ...	53	286	25	95	
Do. do. 1895 ...	84	365	42	99	
Do. do. 1894 ...	453	2,450	36	131	

TO STATIONS ON THE EAST INDIAN AND CONNECTED RAILWAYS *vid* G. I. P.

SEHORE ROAD	...	...	...	...
KUTNI	1	1	...	...
MAIHAR	...	...	...	...
MEJA ROAD	...	...	...	...
SUTNA	51	282	...	...
MIRZAPUR	1	1	...	...
AHRAURA ROAD	...	...	...	...
MOGUL SERAI	...	...	...	...
GHAZIPUR	...	...	...	...
PATNA CITY	...	...	...	...
CALCUTTA	...	...	...	...
ALLAHABAD	12	39	...	...
CAWNPORE (VIA JABALPUR) ...	21	94	26	113
BENARES	...	...	...	...
JAUNPUR CITY...	...	...	...	...
AKBARPUR	...	...	...	...
BHATAPARA	...	...	...	...
CHAMPA	...	...	...	...
RAIPUR	...	...	...	...
MALLIPUR...	...	...	...	...
OTHER STATIONS	4	23	...	...
TOTAL EXPORTS FOR 1903 ...	90	440	26	113
Do. do. 1902 ...	138	629	17	66
Do. do. 1901 ...	49	198	11	47
Do. do. 1900 ...	105	484	27	104
Do. do. 1899 ...	111	413	2	4
Do. do. 1898 ...	172	585	44	197
Do. do. 1897 ...	137	451	142	415
Do. do. 1896 ...	74	307	376	1,043
Do. do. 1895 ...	20	78	305	1,103
Do. do. 1894 ...	311	1,126	635	2,656

TO STATIONS ON THE SOUTHERN MAHRATTA RAILWAY.

INDI ROAD...	11	77	1	10
BIJAPUR	2	5	4	11
TELGI	1	6	1	5
ALIMATI	...	...	...	...
BAGALKOT	8	18	11	37
KATGERI	1	1	3	12
ALUR	...	...	2	13
GADAG	7	30	6	24
VITTA	...	...	6	29
KURNOOL ROAD	3	16	1	3
KOPBAL	...	...	13	38
HASPET	...	...	10	36
BELLARY	65	314	80	298
HUBLI	8	16	2	5
DHARWAR...	4	16	...	...
YALVIGI	4	18	...	...
Carried forward...	104	547	140	521

TO STATIONS ON THE SOUTHERN MAHRATTA RAILWAY—*continued.*

STATIONS.	Country Piece-Goods.		Country Twist.		Remarks.
	Pckgs.	Indian Maunds.	Pckgs.	Indian Maunds.	
Brought forward...	104	517	140	521	
BYADGI ...	2	13	.....	.....	
RANIBENNUR ...	.....	.....	2	8	
HARIHAR ...	2	11	.....	.....	
DAVANGERE ...	10	51	.....	.....	
HOLALKHERI ...	3	3	.....	.....	
LONAND ...	.....	.....	.....	.....	
WATHAR ...	.....	.....	1	1	
SATARA ROAD ...	1	6	.....	.....	
KOREGAON ...	2	7	10	20	
RAHIMATPUR ...	.....	.....	1	4	
TASGAON ...	.....	.....	6	30	
MASUR ...	.....	.....	2	2	
KARAD ...	.....	.....	10	48	
KUNDAL ROAD ...	.....	.....	.....	.....	
ASHTA ROAD ...	.....	.....	.....	.....	
SANGLI ROAD ...	1	2	.....	.....	
MIRAJ ...	1	2	.....	.....	
SHEDBAL ...	.....	.....	.....	.....	
CHIKODI ROAD ...	4	27	20	98	
GOKAK ROAD ...	6	36	5	26	
KUDCHI ...	.....	.....	3	19	
JAMKHAND ...	.....	.....	.....	.....	
BELGAUM ...	24	98	19	86	
TADVAL ...	4	23	1	4	
KADUR ...	.....	.....	.....	.....	
KARAJGI ...	1	5	.....	.....	
ARSIKERE ...	10	34	11	55	
BANGALORE ...	624	2,846	49	212	
MYSORE ...	.....	.....	.....	.....	
BIRUR ...	1	5	.....	.....	
SHEMOGA ...	2	10	.....	.....	
KALLURA ...	.....	.....	.....	.....	
GUNTUR ...	.....	.....	.....	.....	
KOLHAPUR ...	22	107	3	22	
SHIRAL ROAD ...	.....	.....	.....	.....	
MYSORE ...	56	271	.....	.....	
HATKANGALE ...	5	25	8	43	
SASVAD ...	.....	.....	.....	.....	
BEZVADA ...	3	6	.....	.....	
TAMKAR ...	.....	.....	.....	.....	
CHIKMAGALUR ...	.....	.....	.....	.....	
OTHER STATIONS...	88	445	1	5	
TOTAL EXPORTS FOR 1903...	976	4,550	292	1,204	
Do. do. 1902...	747	3,745	187	728	
Do. do. 1901...	56	266	25	103	
Do. do. 1900...	89	418	125	310	
Do. do. 1899...	113	494	149	464	
Do. do. 1898...	994	4,734	966	3,591	
Do. do. 1897...	2,120	9,934	787	3,085	
Do. do. 1896...	1,986	9,786	407	1,445	
Do. do. 1895...	1,054	5,170	250	971	
Do. do. 1894...	1,450	6,860	597	2,599	

TO STATIONS ON THE RAJPUTANA-MALWA RAILWAY *viâ* G. I. P. AND ITS CONNECTIONS.

SANAWAD ...	...	4	15	
MORTAKKA ...	1	6	4	10
BARWAHA ...	3	28	12	57
MHOW ...	6	18	2	6
INDORE ...	1	3	1	1
UJJAIN ...	...	...	...	...
CHAMBAL ...	...	...	...	...
BARNAGAR ...	...	...	...	...
RUNIJA ...	...	...	...	...
RUTLAM ...	...	...	...	...
NAMLI ...	...	...	...	...
JAVRA ...	...	...	...	...
MANDSAUR ...	...	...	...	...
NEEMUCH ...	...	...	...	...
OTHER STATIONS ...	...	...	...	...
TOTAL EXPORTS FOR 1903 ...	11	55	23	89
Do. do. 1902 ...	6	11	118	236
Do. do. 1901 ...	7	20	278	535
Do. do. 1900 ...	20	62	218	370
Do. do. 1899 ...	16	44	194	380
Do do. 1898 ...	202	577	145	390
Do. do. 1897 ...	32	158	142	221
Do. do. 1896 ...	21	84	59	147
Do. do. 1895 ...	57	226	149	329
Do. do. 1894 ...	954	4,377	316	1,473

TO STATIONS ON THE NIZAM'S STATE RAILWAY.

STATIONS.	Country Piece-Goods.		Country Twist.		Remarks.
	Pckgs.	Indian Maunds.	Pckgs.	Indian Maunds.	
SERAM	...	...	...	...	
TANDUR	...	...	...	...	
LINGAMPALLI	...	...	...	...	
HYDERABAD	1	5	...	...	
SECUNDERABAD	4	25	...	...	
ALER	...	...	...	...	
WARANGAL	...	...	...	...	
COCONADA	...	...	...	...	
BEZVADA	...	..	...	...	
ELLORE	...	...	...	...	
CHITTAPUR	...	...	...	...	
VIKARABAD	...	...	...	...	
OTHER STATIONS ...	...	...	...	...	
TOTAL EXPORTS for 1903 ...	5	30	...	...	
Do. do. 1902 ...	2	6	9	39	
Do. do. 1901 ...	6	25	80	333	
Do. do. 1900 ...	16	85	2,482	11,607	
Do. do. 1899 ...	33	125	675	2,890	
Do. do. 1898 ...	16	61	154	424	
Do. do. 1897 ...	37	153	21	57	
Do. do. 1896 ...	62	230	49	153	
Do. do. 1895 ...	10	46	25	90	
Do. do. 1894 ...	18	76	22	89	

TO STATIONS ON THE HYDERABAD-GODAVERY VALLEY RAILWAY.

STATIONS.	Country Piece-Goods.		Country Twist.		Remarks.
	Pckgs.	Indian Maunds.	Pckgs.	Indian Maunds.	
AURANGABAD	2	6	...	...	
JALNA	...	...	...	...	
PURUHANI	2	6	...	...	
OTHER STATIONS	...	...	...	...	
TOTAL EXPORTS for 1903 ...	4	12	...	...	
Do. do. 1902 ...	17	75	12	53	
Do. do. 1901 ...	6	20	...	...	
Do. do. 1900 ...	3	8	9	16	

BOMBAY, BARODA AND CENTRAL INDIA RAILWAY.

(Including Rajputana-Malwa Railway.)

	To	Country Piece-Goods.		Country Twist.		Remarks.
		Pckgs.	Indian Maunds.	Pckgs.	Indian Maunds.	
B. B. & C. I. Railway.	BANDRA	1	3	...	...	
	STATIONS between ANDHERI and SURAT (excluding Surat).	1,606	7,326	571	2,191	
	SURAT	1,990	11,300	1,187	3,767	
	STATIONS between SURAT and BROACH (excluding Broach)	246	1,406	56	270	
	BROACH	753	5,272	208	936	
	STATIONS between BROACH and BARODA(excluding Baroda)	446	2,733	19	94	
	BARODA	1,004	5,927	96	346	
	STATIONS between BARODA and ANAND (excluding Anand)..	82	481	12	52	
	ANAND	80	526	5	25	
	STATIONS on the ANAND-GODHRA BRANCH (excluding Godhra)...	385	2,283	9	17	
	GODHRA	545	2,515	6	7	
	STATIONS between ANAND and AHMEDABAD (excluding Nadiad and Ahmedabad)...	81	486	1	4	
	NADIAD	368	2,044	39	148	
	AHMEDABAD	4,595	26,231	1,404	5,415	
	STATIONS between AHMEDABAD and VIRAMGAM (excluding Viramgam)	110	599	1	5	
	VIRAMGAM	67	328	11	42	
	STATIONS on the PATRI BRANCH	59	354	.....	.....	
	STATIONS between VIRAMGAM and WADHWAN (excluding Wadhwan)	6	38	.....	.....	
	WADHWAN	29	217	4	10	
	TOTAL ...	12,443	70,069	3,629	13,329	

BOMBAY, BARODA AND CENTRAL INDIA RAILWAY—*continued.*

	STATIONS.	Country Piece-Goods.		Country Twist.		Remarks.
		Pckgs.	Indian Maunds.	Pckgs.	Indian Maunds.	
B.-G.-J.-P.Ry. *Via* Wadhwan.	LIMBDI ...	...	...	...	...	
	BHAVNAGAR	...	...	...	...	
	JETPUR ...	...	...	...	...	
	DHORAJEE	...	...	...	...	
	OTHER STATIONS ON THE BHAVNAGAR-GONDAL-JUNAGADH-PORBANDER RAILWAY	478	2,405	26	66	
	MORVI RAILWAY	210	1,103	23	44	
	VIA MIYAGAM	501	2,805	209	962	
	„ ANAND	428	2,651	99	350	
	„ VISHVAMITRI	323	1,533	282	1,331	
	„ AHMEDABAD (Ahmedabad-Prantij Ry.)	202	1,151	26	133	
	„ ANKLESHWAR	129	731	6	23	
	„ SURAT	1,448	7,834	511	2,796	
	„ SABARMATI (Ahmedabad D. Ry.)	11	58	2	8	
	TOTAL	3,730	20,271	1,184	5,713	
Foreign Railway *via* Sabarmati.	*VIA* KALOL	71	380	22	115	
	KHODIAR to PALANPUR (excluding Palanpur)	661	3,215	317	1,383	
	PALANPUR	88	441	4	20	
	VIA PALANPUR	320	1,457	74	285	
	MORI to CHITRASANI	218	857	153	773	
	MARWAR RAILWAY JUNCTION AND *via* MARWAR RAILWAY JUNCTION	1,239	6,238	39	106	
	SARDHANA to ERINPURA ROAD	223	1,279	213	1,084	
	BEAWAR	331	2,048	...	...	
	AJMER	484	2,398	5	17	
	NUSSEERABAD to BARL	326	1,839	18	50	
	LADPURA to AGRA (excluding Jeypore, Achnera and Agra)	346	1,786	...	...	
	JEYPORE	1,130	6,031	6	8	
	VIA KUCHAMAN ROAD	84	342	...	...	
	ACHNERA	1	8	...	...	
	STATIONS on the CAWNPORE-ACHNERA RAILWAY	5,133	26,042	587	2,747	
	VIA HATHRAS	2	12	...	...	
	CAWNPORE	44	245	...	...	
	VIA CAWNPORE	2	4	...	...	
	AGRA FORT	750	3,397	10	36	
	VIA AGRA	300	1,468	23	110	
	VIA AGRA CANTONMENT	...	...	...	...	
	STATIONS on the REWARI-BHATINDA-FAZILKA Section (excluding Bhiwani)	38	182	...	...	
	BHIWANI	2,008	7,863	1	5	
	VIA BHATINDA	390	1,700	2	10	
	VIA FEROZEPORE	...	...	...	...	
	STATIONS between BASWA and DELHI (excluding Delhi)	274	1,268	3	9	
	DELHI	30,946	1,47,903	220	1,066	
	VIA DELHI	711	3,164	1	1	
	VIA KOTKAPURA	2,362	7,578	10	36	
	TOTAL	48,482	2,29,145	1,708	7,861	
Foreign Railway *via* Godhra.	NUSSEERABAD to BARL	4	28	...	...	
	RUPAHELI to GANGRAR (excluding Bhilwara)	45	287	3	6	
	BHILWARA	327	2,176	4	13	
	CHANDERIA to KESARPURA (excluding Chitorgarh)	210	1,246	20	26	
	CHITORGARH	104	624	1	1	
	VIA CHITORGARH	634	3,662	...	...	
	NEEMUCH	276	1,712	37	68	
	HARKIAKHAL to DHODHAR (excluding Mandsaur)	171	1,112	41	69	
	MANDSAUR	676	4,080	121	214	
	JAORA to KHANDWA	1,918	10,695	210	636	
	VIA KHANDWA	...	...	...	...	
	VIA UJJAIN	122	648	1	3	
	STATIONS on the GODHRA-RUTLAM-NAGDA RAILWAY	939	5,446	70	325	
	STATIONS on the NAGDA-UJJAIN RAILWAY	956	5,861	39	128	
	TOTAL	6,382	37,577	547	1,489	
	GRAND TOTAL	71,037	3,57,062	7,068	28,392	
	TOTAL EXPORTS FOR 1903	71,037	3,57,062	7,068	28,392	
	Do. do. 1902	74,674	3,68,916	5,084	20,694	
	Do. do. 1901	86,780	4,30,367	4,626	19,455	
	Do. do. 1900	43,256	2,21,455	2,641	10,847	
	Do. do. 1899	41,959	2,15,356	2,440	10,165	
	Do. do. 1898	38,015	1,93,760	3,345	14,649	
	Do. do. 1897	36,229	1,93,265	3,704	15,086	
	Do. do. 1896	32,450	1,71,417	5,106	20,673	
	Do. do. 1895	44,177	2,42,705	6,127	25,214	
	Do. do. 1894	40,050	2,13,058	5,313	21,743	

SUMMARY OF EXPORTS BY ALL RAILWAYS.

	RAILWAYS.	Country Piece-Goods.		Country Twist.	
		Pckgs.	Indian Maunds.	Pckgs.	Indian Maunds.
To Stations on the	G.I. P. RAILWAY (North-East Line)	333	1,648	698	2,562
	Do. (South-East Line)	104	489	118	463
	BENGAL-NAGPUR RAILWAY	463	2,057	357	1,722
	INDIAN MIDLAND RAILWAY	345	1,721	77	394
	MADRAS RAILWAY	657	3,525	1,427	5,626
	DHOND & MUNMAD STATE RAILWAY	4	21	3	15
	EAST INDIAN RAILWAY	90	440	26	113
	SOUTHERN MAHRATTA RAILWAY	976	4,550	292	1,204
	RAJPUTANA-MALWA RAILWAY VIA G. I. P. ...	11	55	23	89
	NIZAM'S STATE RAILWAY	5	30	0	0
	H. Godavery Valley Railway	4	12	0	0
	B. B. & C. I. RAILWAY (including Rajputana-Malwa Railway)	71,037	3,57,062	7,068	28,392
	TOTAL EXPORTS IN 1903	74,029	3,71,610	10,089	40,580
	Do. do. 1902	78,924	3,89,510	8,850	36,101
	Do. do. 1901	90,404	4,48,995	8,105	33,428
	Do. do. 1900	46,526	2,38,196	6,599	26,641
	Do. do. 1899	47,402	2,42,198	5,959	21,433
	Do. do. 1898	46,756	2,35,280	11,795	34,637
	Do. do. 1897	43,565	2,27,900	10,239	28,305
	Do. do. 1896	38,908	2,03,678	8,752	30,504
	Do. do. 1895	50,565	2,73,974	12,421	36,183
	Do. do. 1894	53,148	2,77,663	15,716	50,502

ANNUAL PROGRESS OF RAILWAYS IN INDIA SINCE THEIR COMMENCEMENT.

Year.	Total Miles.	Year.	Total Miles.	Year.	Total Miles.	Year.	Total Miles.
1853	20	1866	3,563	1879	8,498	1892	17,894
1854	71	1867	3,929	1880	9,166	1893	18,510
1855	169	1868	4,008	1881	9,894	1894	18,906
1856	272	1869	4,255	1882	10,153	1895	19,555
1857	287	1870	4,771	1883	10,462	1896	20,262
1858	427	1871	5,074	1884	11,635	1897	21,123
1859	625	1872	5,369	1885	12,287	1898	22,048
1860	838	1873	5,697	1886	12,896	1899	23,528
1861	1,587	1874	6,226	1887	14,109	1900	24,760
1862	2,333	1875	6,543	1888	14,582	1901	25,373
1863	2,507	1876	6,862	1889	15,893	1902	25,931
1864	2,958	1877	7,322	1890	16,407	1903	26,956
1865	3,363	1878	8,223	1891	17,314		

*Page 15.—The figures as regards Piece-goods have since been compared with those published by Government and are found to be approximately correct.

Statement showing the Exports of Indian Manufactured Piece-Goods and Yarns by Sea and Rail during the years 1894 *to* 1903.

Year.	Piece-Goods		Total.	Yarns				Total.		Remarks.
	By Sea.	By Rail.		By Sea.		By Rail.				
	Packages.	Packages.	Packages.	Packages.	lbs.	Packages.	lbs.	Packages.	lbs.	
1894	86,208	53,148	1,39,356	4,68,995	18,21,23,551	15,716	41,55,312	4,84,711	18,62,78,863	
1895	98,079	50,565	1,48,644	4,96,421	19,36,02,163	12,421	29,77,128	5,08,842	19,55,79,291	
1896	93,775	38,908	1,32,683	5,84,599	22,93,46,959	8,752	25,09,864	5,93,351	23,18,56,823	
1897	75,337	43,565	1,18,902	4,61,260	18,11,84,351	10,239	23,28,928	4,71,499	18,35,13,279	
1898	75,203	46,756	1,21,959	5,53,681	21,87,24,607	11,795	28,40,139	5,65,476	22,15,64,746	
1899	92,751	47,402	1,40,153	6,81,039	26,95,59,281	5,959	17,63,630	6,86,998	27,13,22,911	
1900	83,931	46,526	1,30,457	3,46,503	13,65,71,588	6,599	21,92,174	3,53,102	13,87,63,762	
1901	97,148	90,464	1,87,552	6,42,032	25,43,17,562	8,105	26,68,361	6,50,137	25,69,85,923	
1902	1,05,160	78,924	1,84,084	6,74,450	26,66,98,930	8,850	29,70,596	6,83,300	26,96,69,526	
1903	1,07,178	74,029	1,81,207	7,25,338	28,69,30,007	10,089	33,39,154	7,35,427	29,02,59,161	

Statement showing the arrivals of Cotton into Bombay by Sea and Rail during the years 1894 *to* 1903.

By	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.	1903.
	Cwts.	Cwts.	Cwts.	Cwts.	Cwts.	Cwts.	Cwts.	Cwts.	Cwts.	Cwts.
Steamers and Country Craft	16,42,612	16,32,228	15,05,213	8,68,732	9,45,430	14,24,785	5,58,829	5,48,171	7,13,185	11,54,650
B. B. & C. I. Railway	14,00,810	19,17,601	21,18,116	17,94,956	16,94,377	18,59,612	6,78,406	13,46,872	16,50,540	21,03,109
G. I. P. Railway	27,81,828	31,55,920	31,96,394	24,61,585	40,12,843	39,59,682	18,60,160	53,21,171	48,64,101	55,38,828
Total Cwts...	58,25,250	67,05,749	68,19,723	51,25,273	66,52,650	72,44,079	30,97,395	72,16,214	72,27,826	87,96,587
Total F.-P. Bales of 3½ Cwts. each...	16,64,367	19,15,929	19,48,491	14,64,375	19,00,766	20,69,734	8,84,977	20,61,775	20,65,091	25,13,310

Statement showing the Exports of Cotton to Europe, China, Japan, Calcutta, &c., from Bombay during the years 1894 *to* 1903.

To	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.	1903.
	F. P. Bales.	F. P. Bales.	F. P. Bales.	F. P. Bales.	F. P. Bales.	F. P. Bales.	F. P. Bales.	F. P. Bales.	F. P. Bales.	F. P. Bales.
Europe	7,97,070	6,24,465	7,72,258	5,11,899	4,90,544	5,00,232	2,32,425	5,60,434	5,77,929	9,58,199
China	5,679	4,902	32,347	29,261	24,632	68,131	15,570	89,214	59,934	30,812
Japan	1,08,037	1,39,031	2,79,277	3,78,106	4,40,735	4,88,985	1,61,124	4,77,045	4,41,753	5,23,809
Calcutta and other Ports	49,845	40,951	43,285	40,997	35,730	14,446	16,337	17,668	12,063	13,988
Total Bales...	9,60,631	8,09,349	11,27,167	9,60,263	9,91,541	10,71,794	4,25,456	11,44,361	10,91,679	15,26,808

EXPORTS OF BOMBAY MANUFACTURED PIECE-GOODS AND YARNS FROM BOMBAY PORT ONLY.

(*From Official Returns.*) 1902-03. (*Years ending* 31*st March* 1903.)

EXPORTED TO	Length and Weight.							Value.					
	Piece-Goods.		Yarns.	Percentage of		Total Weight.		Lakhs of Rupees.		Percentage of		Total Value in Lakhs of Rupees.	Percentage.
	Millions of [0000's omitted.]			Goods.	Yarns.	Millions of lbs. ['0000's omitted.]	Percentage.	(000's omitted.)		Goods.	Yarns.		
	Yards.	lbs.	lbs.	%	%		%	Goods.	Yarns.	%	%	[000's omitted.]	%
Foreign Ports	44·86	*11·22	228·45	15·53	85·30	239·67	70·47	†61·13	787·90	16·35	84·79	‡849·03	65·16
Indian Ports	119·10	*29·78	35·23	41·22	13·15	65·01	19·12	160·46	127·03	42·93	13·67	287·49	22·06
Interior by Rail	*125.00	31·25	4·15	43·25	1·55	35·40	10·41	152·21	14·28	40·72	1·54	166·49	12·78
Total Indian	244·10	61·03	29·38	84·47	14·70	100·41	29·53	312·67	141·31	83 65	15·21	453·98	34·84
Grand Total	288·96	72·25	267·83	100·00	100·00	340·08	100·00	373·80	929·21	100·00	100·00	1303 01	100·00

* Assuming 4 yards to be equivalent to 1 lb. and *vice versa* (reduced from 4·33 yards, the basis in years previous to 1895-96).
† Piece-Goods only, value *including all other sorts* (Handkerchiefs, Hosiery, &c., &c.) 66·16 lakhs; or
‡ Inclusive of Yarns 854·02 lakhs of Rupees.

1901-1902.

Foreign Ports	44·08	*11·02	246·58	13·88	87·96	257·60	71·60	†62·22	844·54	15·44	87·27	‡906·76	66·16
Indian Ports	127·77	*31·94	29·41	40·22	10·49	61·35	17·05	163·43	108·12	40·57	11·17	271·55	19·81
Interior by Rail	*145·81	36·45	4·36	45·90	1·55	40·81	11·35	177·20	15·08	43·99	1·56	192·28	14·03
Total Indian	273·58	68·39	33·77	86·12	12·04	102·16	28·40	340·63	123·20	84·56	12·73	463·83	33·84
Grand Total	317·66	79·41	280·35	100·00	100·00	359·76	100·00	402·85	967·74	100·00	100·00	1,370·59	100·00

* Assuming 4 yards to be equivalent to 1 lb. and *vice versa* (reduced from 4·33 yards, the basis in years previous to 1895-96).
† Piece-Goods only, value *including all other sorts* (Handkerchiefs, Hosiery, &c., &c.) 66·76 lakhs; or
‡ Inclusive of Yarns 911·30 lakhs of Rupees.

1900-1901.

Foreign Ports	38·37	*9·59	113·83	17·06	77·58	123·42	60·82	† 54·00	401·22	19·16	76·39	‡455·22	56·40
Indian Ports	92·62	*23·15	29·43	41·19	20·06	52·58	25·91	114·75	111·44	40·71	21·22	226·19	28·03
Interior by Rail	*93·88	23·47	3·46	41·75	2·36	26·93	13·27	113·13	12·57	40·13	2·39	125·70	15·57
Total Indian	186·50	46·62	32·89	82·94	22·42	79·51	39·18	227·88	124·01	80·84	23·61	351·89	43·60
Grand Total	224·87	56·21	146·72	100·00	100·00	202·93	100·00	281·88	525·23	100·00	100·00	807·11	100·00

* Assuming 4 yards to be equivalent to 1 lb. and *vice versa* (reduced from 4·33 yards, the basis in years previous to 1895-96).
† Piece-Goods only, value *including all other sorts* (Handkerchiefs, Hosiery, &c., &c.) 58·68 lakhs; or
‡ Inclusive of Yarns 459·90 lakhs of Rupees.

FOREIGN COUNTRIES TO WHICH GREY COTTON PIECE-GOODS OF BOMBAY MANUFACTURE HAVE BEEN EXPORTED SINCE 1896-97.

(*From Government Returns.*) (*Years ending 31st March.*)

Description.	To	In Millions of Yards (0000's omitted.)						
		1902-03.	1901-02.	1900-01.	1899-1900.	1898-99.	1897-98.	1896-97.
T-Cloths	Mozambique	2·42	1·76	2·34	4·11	3·71	3·72	2·85
	Zanzibar	4·13	3·79	2·43	4·42	5·65	6·39	8·69
	Aden	·43	1·47	·45	2·24	2·05	2·53	·95
	China (Hongkong)	...	.....	·14	·07	·29	·27	·35
	Do. (Treaty Ports*)	·18	·19	·23	1·56	1·02	1·34	5·05
	Mekran and Sonmiani	·10	·14	·15	·15	·21	·24	·04
	Abyssinia	·87	·97	2·36	1·80	1·35	·09	1·80
	Other Countries	1·74	1·53	1·43	2·92	2·44	3·05	2·38
	Total	9·87	9·85	9·53	17·27	16·72	17·63	22·11
Sheetings	Abyssinia	...	.....	·03	·01	·03	·10	·22
	Mozambique	·05	·01	·01	·03	·06	·75	1·08
	Zanzibar	·06	·05	·14	1·61	3·25	3·07	3·47
	Aden	·08	·25	·09	·13	·23	·45	·85
	Arabia	·02	·16	·05	·17	·36	·64	·76
	China (Treaty Ports*)	...	.....	·08	·11	·03	.....	·68
	Other Countries	·41	·38	·54	·19	·20	·39	·96
	Total	·62	·85	·94	2·25	4·16	5·40	8·02
Domestics	Aden	2·95	3·22	2·02	2·89	3·60	4·96	5·40
	Arabia	·02	·09	·08	·12	·11	·11	·13
	Other Countries	·27	·26	·43	·38	·14	·25	·34
	Total	3·24	3·57	2·53	3·39	3·85	5·32	5·87
Drills and Jeans	Zanzibar	...	.....	...	.....	.....	.....	.....
	Aden	·01	·03	...	·29	.....	·02	.....
	Other Countries	·01	·02	·08	·09	·02	.....	·10
	Total	·02	·05	·08	·38	·02	·02	·10
Long Cloths	Abyssinia	1·27	·71	1·93	·53	1·37	·03	2·42
	Mozambique	6·40	2·54	2·15	1·03	·88	·60	·28
	Zanzibar	1·40	2·61	·60	·86	·23	·41	1·58
	Aden	2·54	4·51	2·68	3·83	3·55	5·07	2·20
	China (Treaty Ports*)	·21	·03	·16	1·60	·26	·08	·40
	Arabia	·09	·43	·16	·49	·14	·44	·24
	Persia	·09	·23	·32	·05	·40	·51	·59
	Straits	·05	·04	·29	·18	·10	·05	·06
	Turkey in Asia	·96	2·84	1·36	1·89	1·46	1·31	2·30
	Egypt	·93	·37	·69	·67	·71	·17	·17
	Other Countries	·03	·08	·09	·62	·45	·22	·36
	Total	13·97	14·39	10·43	11·75	9·55	8·89	10·60
Chudders	Aden	·36	·44	·40	·64	·62	·46	·65
	Zanzibar	2·51	2·39	1·90	1·49	1·62	1·89	2·00
	Other Countries	2·36	1·22	1·29	1·29	1·18	1·04	·86
	Total	5·23	4·05	3·59	3·42	3·42	3·39	3·51
Dhooties	Aden	·14	·14	·02	·02	·04	·02	·08
	Other Countries	·22	·15	·22	·14	·22	·12	·04
	Total	·36	·29	·24	·16	·26	·14	·12
Other Sorts	Total	2·40	1·95	3·96	4·45	1·67	·52	·21
	Grand Total	35·71	35·00	31·30	43·07	39·65	41·31	50·54

* Almost entirely to Shanghai.

DESCRIPTIONS OF GREY COTTON PIECE-GOODS OF BOMBAY MANUFACTURE EXPORTED TO FOREIGN PORTS SINCE 1895-96.

(*From Government Returns.*) (*Years ending 31st March.*)

Description.	In Millions of Yards (0000's omitted).							
	1902-03.	1901-02.	1900-1901.	1899-1900.	1898-99.	1897-98.	1896-97.	1895-96.
T-Cloths	9·87	9·85	9·53	17·27	16·72	17·63	22·11	24·27
Sheetings	·62	·85	·94	2·25	4·16	5·40	8·02	15·24
Domestics	3·24	3·57	2·53	3·39	3·85	5·32	5·87	9·11
Drills and Jeans	·02	·05	·08	·38	·02	·02	·10	·02
Long Cloths	13·97	14·39	10·43	11·75	9·55	8·89	10·60	12·86
Chudders	5·23	4·05	3·59	3·42	3·42	3·39	3·51	2·98
Dhooties	·36	·29	·24	·16	·26	·14	·12	·33
Other sorts	2·40	1·95	3·96	4·45	1·67	·52	·21	·09
Total Millions of Yards...	35·71	35·00	31·30	43·07	39·65	41·31	50·54	64·90
Total Lakhs of Rupees...	44·02	45·06	38·97	52·36	47·11	49·22	61·16	80·54

EXPORTS OF BOMBAY SPUN TWIST BY SEA AND RAIL. REDUCED TO BALES OF 400 lbs. EACH.

January 1st to December 31st.	To China.	To Japan.	Total to China and Japan.	Total to other ports.	Total Exports by Sea.	Total Exports by Rail.	Total Exports by Sea and Rail.
1880	63,194	4,527	67,721	38,825	106,546	14,092	120,638
1881	61,783	7,378	69,161	41,092	110,253	14,333	124,586
1882	81,434	9,854	91,288	41,502	132,790	14,400	147,190
1883	94,982	17,421	112,403	42,130	154,533	9,091	163,624
1884	127,318	13,846	141,164	48,226	189,390	6,049	195,439
1885	154,517	19,020	173,537	43,197	216,734	5,129	221,863
1886	199,407	20,543	219,950	45,103	265,053	4,649	269,702
1887	205,158	39,730	244,888	47,799	292,687	3,451	296,138
1888	234,071	52,697	286,768	49,789	336,557	2,250	338,807
1889	254,697	62,220	316,917	59,326	376,243	1,615	377,858
1890	325,060	37,722	362,782	67,201	429,983	13,942	443,925
1891	365,038	10,939	375,977	78,136	454,113	9,147	463,260
1892	385,771	21,445	407,216	69,547	476,763	7,850	484,613
1893	297,572	14,198	311,770	88,130	399,900	9,139	409,039
1894	338,703	10,743	349,446	105,863	455,309	10,388	465,697
1895	374,119	2,515	376,634	104,871	481,505	7,443	488,948
1896	471,023	2,467	473,490	99,877	573,367	6,274	579,641
1897	361,221	645	361,866	91,095	452,961	5,822	458,783
1898	437,645	475	438,120	108,691	546,811	7,125	553,936
1899	579,619	250	579,869	94,029	673,898	4,408	678,306
1900	253,331	100	253,431	87,998	341,429	5,480	346,909
1901	536,195	.....	536,195	99,599	635,794	6,876	642,670
1902	555,487	.....	555,487	111,259	666,746	7,427	674,173
1903	604,044	.....	604,044	113,256	717,300	8,348	725,648

QUALITIES OF YARNS OF BOMBAY MANUFACTURE EXPORTED TO FOREIGN PORTS SINCE 1895-96.

(*From Government Returns.*) (*Years ending 31st March.*)

Description.	In Millions of lbs. (0000's omitted).							
	1902-03.	1901-02.	1900-01.	1899-1900.	1898-99.	1897-98.	1896-97.	1895-96.
Mule No. 15s and under	94·47	116·14	48·56	125·28	95·82	68·62	50·93	49·37
„ „ 16s to 24s	132·10	129·05	63·89	92·92	101·21	100·05	124·44	121·65
„ „ 25s to 32s	·33	·29	·27	·16	·17	·13	·18	·21
„ „ 33s to 44s	·13	·04	·14	·03	...	...	·15	·02
Total ...	227·03	245·52	112·86	218·39	197·20	168·80	175·70	171·25
Water No. 20s and under	...	...	...	...	...	·27	·07	·01
„ „ 21s to 30s	...	...	...	...	...	...	...	...
„ „ 31s to 40s	...	...	...	...	...	...	...	·01
Total ...	...	...	...	...	...	·27	·07	·02
Colored Yarns ... ... Total ...	1·41	1·06	·97	1·07	·70	·99	·85	1·10
Total Yarns ...	228·44	246·58	113·83	219·46	197·90	170·06	176·62	172·37

FOREIGN COUNTRIES TO WHICH YARNS OF BOMBAY SPINNING HAVE BEEN EXPORTED SINCE 1895-96.

(*From Government Returns.*) (*Years ending 31st March.*)

Quality.	To	In Millions of lbs.							
		1902-03.	1901-02.	1900-01.	1899-1900.	1898-99.	1897-98.	1896-97.	1895-96.
Mule No. 15s and under.	Aden	1·12	·76	·63	1·68	·98	1·24	·85	·86
	Japan	...	...	...	·02	...	...	...	...
	China (Hongkong) ...	40·74	43·70	34·82	57·29	62·75	43·07	32·99	35·78
	China (Treaty Ports*)...	49·01	70·19	11·94	65·69	31·18	23·63	16·37	12·13
	Other Countries ...	3·60	1·49	1·17	·60	·91	·68	·72	·60
	Total ...	94·47	116·14	48·56	125·28	95·82	68·62	50·93	49·37
16s to 24s	Aden	·60	·67	·42	·51	·50	·58	·45	·42
	Japan	...	...	...	·12	·04	·35	·64	1·21
	China (Hongkong) ...	56·47	53·17	34·17	35·70	49·86	47·74	59·41	53·00
	China (Treaty Port*) ...	67·87	68·87	23·86	52·98	44·40	46·06	59·44	62·58
	Straits	4·30	3·15	3·05	2·22	3·71	3·16	2·57	2·54
	Other Countries ...	2·86	3·19	2·39	1·39	2·71	2·16	1·93	1·90
	Total ...	132·10	129·05	63·89	92·92	101·22	100·05	124·44	121·65
Above 24s	Total ...	·46	·33	·41	·19	·16	·14	·33	·23
	Total Mule ...	227·03	245·52	112·86	218·39	197·20	168·81	175·70	171·25
Water.....	„ Water ...	...	...	...	...	...	·27	·07	·02
Colored	„ Colored ...	1·41	1·06	·97	1·07	·70	·99	·85	1·10
	Grand Total ...	228·44	246·58	113·83	219·46	197·90	170·07	176·62	172·37
	Value in Lakhs of Rs...	787·89	844·54	401·22	625·46	590·69	594·78	648·92	629·60

* Almost entirely to Shanghai.

COTTON.

RECEIPTS at, and Exports from, Bombay Port, also Mill consumption in the Island of Bombay. In thousands of Bales (000's omitted).

Years ending 30th June.

Years ending 30th June.	Receipts.	Exports to			Mill consumption.	Total.	Years ending 30th June.	Receipts.	Exports to			Mill consumption	Total.
		Europe.	Elsewhere.	Total.					Europe.	Elsewhere.	Total.		
1859	.....	490	152	642			1881	1,244	874	60	934	273	1,207
1860	.....	566	202	768	Maxm. Exports up to this year.		1882	1,832	1,521	87	1,608	277	1,885
							1883	1,770	1,335	95	1,430	313	1,743
1861	.....	835	61	896	American War.		1884	1,759	1,295	100	1,395	348	1,743
1862	.....	911	8	919	In 1863 and 1864		1885	1,139	791	70	861	392	1,253
1863	.....	867	3	870	Bombay Imported Cotton from China.		1886	1,480	1,009	61	1,070	391	1,461
1864	.....	1,065	1	1,066			1887	1,703	1,147	40	1,187	454	1,641
1865	.....	1,187	14	1,201	42	1,243	1888	1,472	893	58	951	500	1,451
1866	.....	1,277	5	1,282	46	1,328	1889	1,851	1,286	46	1,332	565	1,897
1867	.....	1,030	48	1,078	47	1,125	1890	2,235	1,488	71	1,559	636	2,195
1868	.....	1,225	56	1,281	48	1,329	1891	2,020	1,070	107	1,177	762	1,939
1869	.....	1,115	50	1,165	49	1,214	1892	1,770	905	202	1,107	728	1,835
1870	.....	967	39	1,006	50	1,056	1893	1,738	816	169	985	724	1,709
1871	1,085	1,002	48	1,050	52	1,102	1894	1,769	908	159	1,067	731	1,798
1872	1,151	1,079	34	1,113	53	1,166	1895	1,540	525	143	668	815	1,483
1873	978	917	34	951	67	1,018	1896	2,151	800	346	1,146	849	1,995
1874	1,311	1,192	25	1,217	83	1,300	1897	1,612	603	405	1,008	703	1,711
1875	1,345	1,285	20	1,305	135	1,440	1898	1,730	424	409	833	817	1,650
1876	1,073	980	35	1,015	147	1,162	1899	2,033	578	520	1,098	951	2,049
1877	1,141	920	38	958	161	1,119	1900	988	117	444	561	745	1,306
1878	961	800	46	846	204	1,050	1901	1,896	620	340	960	696	1,656
1879	832	652	64	716	181	897	1902	2,142	525	732	1,257	987	2,244
1880	1,171	874	34	908	220	1,128	1903	2,454	921	349	1,270	986	2,256

STATISTICS OF COTTON SPINNING AND WEAVING IN THE INDIAN MILLS in the twelve months, April 1903 to March 1904, compared with the corresponding period of 1901-1902 and 1902-1903.

No. 1.—*ABSTRACT STATEMENT of the QUANTITY (in pounds) of YARN Spun.*

	Twelve months, 1st April to 31st March.		
	1901-1902.	1902-1903.	1903-1904.
British India.			
Bombay	415,028,240	419,526,005	414,929,169
Madras	32,120,814	31,256,104	28,714,162
Bengal	45,403,254	47,085,551	46,487,245
United Provinces of Agra and Oudh (also Ajmer-Merwara)	33,589,403	27,050,371	29,930,262
Punjab	9,629,422	9,587,025	11,578,346
Central Provinces and Berar (*a*)	24,233,715	24,306,984	24,548,608
TOTAL ...	560,004,848	558,812,040	556,187,792
Foreign Territory.			
Berar (*a*) and the Native States of Indore, Mysore, Baroda, Nandgaon, Bhavnagar, Hyderabad (*b*), Wadhwan (*c*), Quilon (*d*), Pondichery (*e*), Kishengarh (*f*), and Ujjain (*g*).	12,933,318	17,422,486	21,434,153
GRAND TOTAL ...	572,938,166	576,234,526	577,621,945

(*a*) Berar ceased to be Foreign Territory from the 1st October 1902 when it was leased in perpetuity to the British Government, but in this table the transfer has been made from the 1st October 1903 when the administration was transferred to the Central Provinces.

(*b*) From September 1902. | (*d*) From November 1902. | (*f*) From April 1903.
(*c*) From October 1902. | (*e*) For January 1903. | (*g*) For May 1903.

No. 2.—*ABSTRACT STATEMENT of the QUANTITY of WOVEN GOODS Produced.*

[N.B.—The weight in pounds represents the weight of all woven goods ; the measure in yards represents the equivalent of the weight of grey goods.]

		Twelve months, 1st April to 31st March.		
		1901-1902.	1902-1903.	1903-1904.
British India.				
Bombay	pounds.	98,545,580	100,465,618	112,716,333
	yards.	352,376,716	346,471,461	385,986,484*
	dozens.	49,612	39,734	38,998
Madras	pounds.	6,073,322	4,995,069	5,343,576
	yards.	6,850,130	6,418,592	5,995,652
Bengal	pounds.	392,846	414,856	690,815
	yards.	1,308,714	1,341,214	2,562,559
United Provinces of Agra and Oudh (also Ajmer-Merwara)	pounds.	4,537,808	4,585,527	5,493,867
	yards.	16,120,461	13,984,361	18,321,453
Punjab	pounds.	272,695	177,510	64,927
	yards.	720,468	412,306	173,801
Central Provinces and Berar (*a*) ...	pounds.	6,143,908	6,646,052	7,565,931
	yards.	18,685,976	17,421,450	22,021,414
TOTAL ...	pounds.	115,966,159	117,284,632	131,875,449
	yards.	396,062,465	386,049,384	435,061,363
	dozens.	49,612	39,734	38,998
Foreign Territory.				
Berar (*a*), and the Native States of Indore, Mysore, Baroda, Nandgaon, Bhavnagar, Hyderabad (*b*), Wadhwan (*c*), and Pondichery (*d*).	pounds.	3,684,526	5,489,382	6,167,945
	yards.	13,682,528	20,267,333	22,331,070
GRAND TOTAL ...	pounds.	119 650,685	122,774,014	138,043,394
	yards.	409,744,993	406,316,717	457,392,433
	dozens.	49,612	39,734	38,998

(*a*) Berar has been transferred from the Foreign Territory with effect from the 1st October 1903, see note (*a*) to abstract statement No. 1.

(*b*) From September 1902. | (*c*) From October 1902. | (*d*) For January 1903.

* Includes 1,170 yards of hosiery.

No. 3.—DETAILED STATEMENT of the QUANTITY (in pounds) and the COUNTS (or numbers) of YARN Spun.

Count or Number.	Twelve Months, 1st April to 31st March.			Count or Number.	Twelve Months, 1st April to 31st March.		
	1901-02.	1902-03.	1903-04.		1901-02.	1902-03.	1903-04.
BOMBAY PRESIDENCY.				**BOMBAY ISLAND.**			
1	60,937	19,859	4,200	1	58,130	19,859	4,200
2	6,023	63,174	40,990	2	3,290	58,314	40,990
3	....	....	162,427	3	....	....	158,192
4	131,378	346,947	584,195	4	123,989	309,313	373,367
5	79,287	....	5,977	5	21,444	....	5,977
6	9,566,352	11,775,346	9,733,573	6	8,572,025	10,726,763	7,949,470
7	768,406	2,015,172	2,868,761	7	449,429	1,357,989	2,298,095
8	2,422,345	3,276,402	2,935,371	8	2,053,937	2,727,208	2,114,693
9	1,148,958	1,510,702	2,174,451	9	268,570	521,480	885,147
10	115,625,448	97,181,715	93,227,503	10	112,519,319	93,864,117	85,335,383
Total Nos. 1 to 10	129,810,234	116,189,317	111,737,948	Total Nos. 1 to 10	124,075,133	109,585,043	99,166,014
11	11,590,663	13,366,068	14,589,446	11	10,353,467	12,011,681	13,475,072
12	28,855,657	29,953,900	40,187,284	12	27,537,818	28,427,084	37,321,349
13	5,409,910	6,132,046	4,587,854	13	2,966,095	4,028,810	3,333,095
14	2,839,596	2,877,319	6,683,739	14	2,121,612	2,126,642	5,957,051
15	664,592	604,304	668,393	15	222,307	52,869	103,214
16	34,337,086	23,541,196	23,373,784	16	31,633,414	21,747,019	21,626,972
17	6,094,586	6,994,643	7,694,632	17	4,457,686	5,050,499	6,704,707
18	6,308,136	6,394,142	5,800,801	18	3,969,935	4,109,417	4,313,404
19	2,117,769	1,509,109	1,179,729	19	1,985,840	970,636	680,394
20	112,811,632	127,703,977	110,600,059	20	84,773,977	97,269,222	81,355,243
Total Nos. 11 to 20	210,514,627	219,076,704	215,665,711	Total Nos. 11 to 20	170,022,131	175,793,879	175,270,501
21	10,603,745	15,877,769	15,316,793	21	5,654,133	9,438,372	8,445,484
22	17,416,837	17,793,108	16,056,706	22	10,352,710	10,443,445	9,528,469
23	2,268,974	2,175,292	1,575,006	23	1,132,048	1,242,834	856,566
24	15,505,224	16,258,728	15,306,283	24	10,106,513	11,086,211	9,430,386
25	508,373	921,812	3,134,378	25	139,098	245,766	267,868
26	5,410,086	7,090,361	6,652,922	26	3,132,177	3,447,682	3,425,975
27	94,777	238,426	130,442	27	3,466	525	46,698
28	3,857,251	4,904,393	3,921,931	28	2,501,903	2,404,437	2,416,182
29	1,122	781	66,716	29	....	....	65,457
30	7,836,573	7,847,535	10,210,625	30	3,010,250	3,017,956	3,562,166
Total Nos. 21 to 30	63,503,262	73,108,205	72,404,802	Total Nos. 21 to 30	36,032,298	41,327,228	38,044,251
31	192,090	219,025	248,557	31	81,146	1,048	26,299
32	4,259,798	3,408,853	3,885,749	32	891,178	1,353,436	1,116,074
33	918,518	1,366,065	1,574,681	33	95,105	89,800	120,236
34	1,814,024	2,136,734	3,110,442	34	235,275	430,416	735,739
35	108,251	295,492	491,764	35	10,813	....	747
36	467,000	850,920	945,381	36	167,032	187,783	63,853
37	2,567	....	17,600	37	4,734	....	....
38	63,538	84,595	14,759	38	9,548	15,323	839
39	131,048	54,294	29,297	39	138,384	52,794	1,169
40	2,987,950	2,262,958	3,950,523	40	935,573	462,075	698,272
Total Nos. 31 to 40	10,444,784	10,629,836	14,268,753	Total Nos. 31 to 40	2,568,783	2,592,675	2,763,258
Above 40	755,333	521,943	951,955	Above 40	163,918	161,913	283,013
Total ..	415,028,240	419,526,005	414,029,169	Total ..	332,862,263	329,460,738	315,527,037

No. 3—DETAILED STATEMENT of the QUANTITY (in pounds) and the COUNTS (or numbers) of YARN Spun.—continued.

Count or Number.	Twelve Months, 1st April to 31st March.			Count or Number.	Twelve Months, 1st April to 31st March.		
	1901-02.	1902-03.	1903-04.		1901-02.	1902-03.	1903-04.
AHMEDABAD.				**MADRAS.**			
1	....	....	....	1	14,294	8,624	18,098
2	....	....	....	2	13,791	37,526	13,961
3	...	....	4,235	3	....	49	288
4	....	1,925	4,170	4	344,444	379,056	535,371
5	....	....	....	5	....	....	....
6	444,628	532,201	662,710	6	1,105,859	1,049,544	921,708
7	176,781	549,147	468,542	7	....	12,270	13,310
8	149,062	326,425	373,709	8	389,939	632,238	564,934
9	654,470	857,383	1,056,019	9	2,601	18,020	29,400
10	460,919	1,113,781	311,255	10	1,418,457	1,335,966	655,367
Total Nos. 1 to 10	1,885,860	3,380,832	2,880,640	Total Nos. 1 to 10	3,269,185	3,473,293	2,752,437
11	829,246	926,886	823,400	11	70,377	58,258	72,887
12	91,430	179,765	99,670	12	1,055,086	1,077,231	1,231,527
13	1,816,193	1,870,273	1,411,830	13	160,029	195,985	249,257
14	308,601	291,320	369,692	14	2,868,706	2,126,271	2,302,845
15	62,975	235,887	342,286	15	562,479	821,504	1,039,954
16	1,423,180	519,965	248,917	16	2,959,336	2,164,429	2,144,651
17	1,474,507	1,800,728	580,527	17	1,120,652	1,270,661	1,538,694
18	713,249	741,402	597,913	18	2,587,285	3,047,432	803,648
19	20,760	77,617	6,124	19	2,634,384	2,074,796	2,128,880
20	6,564,353	6,709,047	7,440,337	20	10,808,513	10,899,658	9,562,796
Total Nos. 11 to 20	13,324,496	13,402,890	11,920,696	Total Nos. 11 to 20	24,827,447	23,736,225	21,075,139
21	3,181,199	4,356,090	4,140,624	21	699,417	847,815	1,117,588
22	4,367,614	4,552,177	3,648,547	22	439,684	553,583	486,092
23	1,084,470	932,458	718,440	23	....	11,204	20,370
24	4,119,459	4,069,106	4,711,931	24	167,704	99,586	88,731
25	298,519	656,073	2,851,796	25	....	....	.....
26	1,554,939	3,046,417	2,545,535	26	555,451	412,882	567,769
27	84,968	218,283	82,685	27	.....	....	....
28	873,065	1,934,852	790,817	28	14,968	115,663	208,190
29	1,122	731	1,259	29	....	....	....
30	2,127,627	2,620,478	3,933,226	30	1,033,806	1,138,521	1,358,892
Total Nos. 21 to 30	17,692,982	22,386,165	23,424,760	Total Nos. 21 to 30	2,911,030	3,179,254	3,842,632
31	168,479	214,926	191,898	31	....	....	....
32	2,872,324	1,874,150	2,460,619	32	....	14,751	86,593
33	796,096	1,145,993	1,427,196	33	....	....	....
34	1,058,775	1,70 ,643	2,374,703	34	....	....	....
35	48,827	207,908	441,269	35	....	....	....
36	258,756	644,133	755,010	36	....	....	....
37	....	1,536	17,600	37	....	....	....
38	44,332	19,272	9,711	38	....	....	....
39	160	1,500	28,128	39	....	....	....
40	1,072,906	1,212,448	2,026,929	40	1,026,367	791,481	947,043
Total Nos. 31 to 40	6,320,655	7,030,509	9,742,063	Total Nos. 31 to 40	1,026,367	806,232	1,033,636
Above 40	303,799	241,170	254,928	Above 40	66,785	61,100	10,318
Total ..	39,527,792	46,441,566	48,223,087	Total ..	32,120,814	31,256,104	28,714,162

No. 3.—DETAILED STATEMENT of the QUANTITY (in pounds) and the COUNTS (or numbers) of YARN Spun—continued.

Count or Number.	Twelve Months, 1st April to 31st March.			Count or Number.	Twelve Months, 1st April to 31st March.		
	1901-1902.	1902-03.	1903-04.		1901-1902.	1902-03.	1903-04.
	BENGAL.				**UNITED PROVINCES OF AGRA & OUDH (ALSO AJMER-MERWARA).**		
1	7,007	5,389	4,660	1	....	....	....
2	410,241	330,556	322,883	2	....	....	9,724
3	42,099	6,787	6,554	3	....	....	48,157
4	64,382	171,225	80,740	4	732,715	523,259	696,365
5	160	1,327	1,201	5	....	4,229	....
6	1,105,366	756,166	1,013,720	6	265,167	5,393	24,797
7	116,907	381,920	340,651	7	117,937	104,696	166,914
8	614,977	941,519	1,041,344	8	346,977	193,080	129,283
9	....	168,204	35,415	9	684,253	813,879	798,586
10	20,569,592	16,537,350	17,056,913	10	6,798,464	4,622,138	5,038,513
Total Nos. 1 to 10	22,930,721	19,300,443	19,904,081	Total Nos. 1 to 10	8,945,513	6,266,674	6,912,339
11	1,984,947	2,685,112	2,642,929	11	3,030,905	2,409,400	3,336,093
12	5,738,411	4,919,791	6,156,446	12	3,929,426	2,547,882	3,278,321
13	1,141,324	1,280,032	1,387,414	13	2,064,634	2,934,767	3,235,577
14	1,758,629	2,125,380	2,620,236	14	4,110,563	1,703,934	2,312,946
15	403,863	805,259	739,896	15	3,727,995	3,340,225	2,172,373
16	4,875,600	5,502,035	4,800,918	16	3,503,760	4,141,310	3,736,440
17	499,821	1,167,023	618,500	17	748,010	425,033	2,116,889
18	2,574,016	2,788,778	1,475,614	18	2,182,740	1,888,393	997,327
19	....	395,796	1,685,494	19	20,747	87,290	811,935
20	2,400,652	3,790,882	2,370,537	20	841,627	958,974	640,164
Total Nos. 11 to 20	21,377,263	25,460,088	23,897,984	Total Nos. 11 to 20.	24,160,416	20,437,208	22,638,065
21	375,608	778,670	616,574	21	1,742	4,694	11,204
22	306,087	820,702	1,018,211	22	98,888	32,568	35,955
23	....	....	1,225	23	1,002	16,845	....
24	201,321	472,491	599,272	24	284,433	200,935	85,264
25	71,106	71,923	100,997	25	....	....	99,758
26	42,966	17,276	47,163	26	13,144	8,051	7,017
27	....	480	....	27	26,612	5,781	953
28	....	....	24,189	28	....	30,777	99,377
29	....	431	....	29	....	....	216
30	59,528	140,945	172,953	30	12,009	5,868	27,183
Total Nos. 21 to 30	1,056,616	2,302,918	2,580,584	Total Nos. 21 to 30	437,830	305,519	366,927
31	....	....	....	31	....	....	....
32	....	21,766	103,299	32	857	9,876	4,111
33 to 35	....	....	....	33	....	....	535
36	....	....	....	34	....	2,644	208
37 to 39	....	....	....	35	....	....	....
40	32,442	336	1,297	36	7,911	426	2,681
				37	....	....	....
				38	33,417	....	....
				39	....	....	....
				40	....	9,038	....
Total Nos. 31 to 40	32,442	22,102	104,596	Total Nos. 31 to 40	42,185	22,584	7,135
Above 40	6,209	....	....	Above 40	3,150	18,286	5 396
Total ..	45,403,254	47,085,551	46,487,245	Total ..	33,589,403	27,150,371	29,930,262

No. 3.—DETAILED STATEMENT of the QUANTITY (in pounds) and the COUNTS (or numbers) of YARN Spun—continued.

Count or Number.	Twelve Months, 1st April to 31st March.			Count or Number.	Twelve Months, 1st April to 31st March.		
	1901-1902.	1902-03.	1903-04.		1901-1902.	1902-03.	1903-04.
	PANJAB.				**CENTRAL PROVINCES and BERAR.***		
1	....	....	....	1	....	....	....
2	....	....	....	2	....	799	....
3	....	....	....	3	818	....	....
4	....	....	....	4	51,859	109,589	49,850
5	....	....	....	5	....	....	442
6	597	....	464	6	1,097,825	880,153	908,344
7	....	....	....	7	....	....	18,953
8	29,629	10,135	109,381	8	1,112,613	1,080,699	764,013
9	....	....	165,502	9	53,501	82,545	394,072
10	431,945	487,399	318,568	10	3,209,542	4,060,310	3,309,382
Total Nos. 1 to 10	462,171	497,534	593,905	Total Nos. 1 to 10	5,525,658	6,214,095	5,445,056
11	2,060,605	2,205,950	2,950,412	11	417,285	174,235	217,263
12	699,217	72,546	285,520	12	5,405,052	4,194,607	4,851,999
13	4,172,348	4,384,262	4,932,379	13	532,959	330,074	291,535
14	123,128	359,006	118,102	14	1,308,824	1,501,782	1,710,616
15	985,620	737,366	975,599	15	163,196	193,269	118,405
16	881,178	917,286	1,181,795	16	2,835,773	2,754,099	2,881,421
17	51,215	137,195	313,614	17	194,589	187,410	186,432
18	....	....	12,099	18	761,952	778,629	1,140,807
19	....	....	8,437	19	116,022	136,721	....
20	124,275	194,302	220,797	20	2,932,049	3,122,061	3,035,132
Total Nos. 11 to 20	9,097,586	9,007,913	10,948,754	Total Nos. 11 to 20	14,667,701	13,372,887	14,433,610
21	3,967	17,963	820	21	635,638	834,932	927,280
22	6,513	16,947	15,535	22	1,896,086	2,155,809	2,202,601
23	....	....	....	23	....	320	108
24	23,886	33,842	....	24	323,870	535,134	381,595
25	....	....	....	25	....	....	....
26	....	1,002	....	26	67,723	58,810	40,633
27	....	....	....	27	....	....	....
28	....	....	....	28	4,548	2,975	469
29	....	....	....	29	....	....	....
30	....	2,146	10,084	30	141,699	162,674	173,136
Total Nos. 21 to 30	34,366	71,900	26,439	Total Nos. 21 to 30	3,069,564	3,750,654	3,725,822
31	....	....	....	31	....	....	....
32	....	....	9,248	32	775,878	748,415	691,786
33	....	....	....	33	....	....	87
34	....	....	....	34	....	....	538
35	....	....	....	35	....	....	....
36 to 39	....	....	....	36	7,280	....	....
40	23,684	9,678	....	37	....	....	411
				38	....	14,597	12,474
Total Nos. 31 to 40	23,684	9,678	9,248	39	....	....	....
				40	117,007	133,270	169,492
Above 40	11,615	....	....	Total Nos. 31 to 40	900,165	896,282	874,738
				Above 40	70,627	73,066	69,382
Total ..	9,629,422	9,587,025	11,578,346	Total ..	24,233,715	24,306,984	24,548,608

* The figures for Berar are included from the 1st October 1903, those for earlier periods being shown in table No. 4.

No. 3.—DETAILED STATEMENT of the QUANTITY (in pounds) and the COUNTS (or numbers) of YARN Spun—concluded.

TOTAL OF BRITISH INDIA.

Count or Number.	Twelve months, 1st April to 31st March.		
	1901-1902.	1902-03.	1903-04.
1	82,238	33,872	26,958
2	430,055	432,055	387,558
3	42,717	6,836	217,426
4	1,324,778	1,530,076	1,946,521
5	79,447	5,556	7,620
6	13,140,966	14,466,602	12,602,596
7	1,003,250	2,514,058	3,408,589
8	4,917,280	6,134,073	5,544,826
9	1,889,313	2,593,350	3,597,426
10	148,053,448	124,224,878	119,606,246
TOTAL Nos. 1 to 10	170,963,492	151,941,356	147,345,766
11	19,155,382	20,899,026	23,809,030
12	45,682,849	42,765,954	55,941,097
13	13,481,204	15,257,166	14,984,016
14	13,009,446	10,693,692	15,748,484
15	6,507,745	6,501,927	5,714,620
16	49,382,742	39,020,355	38,119,009
17	8,708,873	10,181,965	12,468,751
18	14,409,129	14,897,374	10,230,296
19	4,838,922	4,203,712	5,214,475
20	129,418,748	146,669,854	126,429,485
TOTAL Nos. 11 to 20	304,645,040	311,091,025	308,659,263
21	12,320,117	18,361,843	17,990,259
22	20,164,095	21,372,717	19,815,100
23	2,269,976	2,203,661	1,596,709
24	16,506,438	17,600,716	16,461,145
25	579,479	993,735	3,335,138
26	6,089,370	7,588,382	7,345,504
27	121,389	244,687	131,395
28	3,876,767	5,053,308	4,252,156
29	1,122	1,212	66,932
30	9,083,915	9,297,689	11,952,873
TOTAL Nos. 21 to 30	71,012,668	82,718,450	82,947,206
31	192,090	219,925	248,557
32	5,036,533	4,203,661	4,780,786
33	918,518	1,366,065	1,575,253
34	1,314,024	2,136,734	3,111,188
35	108,251	295,492	491,764
36	482,191	853,990	948,062
37	2,567	.....	18,011
38	96,955	49,192	27,233
39	131,048	54,294	29,297
40	4,187,450	3,207,361	5,068,355
TOTAL Nos. 31 to 40	12,469,627	12,386,714	16,298,506
Above 40	914,021	674,495	937,051
TOTAL	560,004,848	558,812,040	556,187,792

No. 4.—DETAILED STATEMENT of the QUANTITY (in pounds) and the COUNTS (or numbers) of YARN Spun.

BERAR,* NATIVE STATES and FOREIGN TERRITORY.

Count or Number.	Twelve months, 1st April to 31st March.		
	1901-1902.	1902-03.	1903-04.
1	.....	.....	.....
2	.....	.....	.....
3	54,182	46,326	107,882
4	.....	6,133	35,909
5	.....	.....	.....
6	894,666	643,013	746,507
7	134,485	488,992	502,694
8	879,686	413,905	389,489
9	78,466	306,124	288,817
10	1,916,194	1,665,022	1,805,514
TOTAL Nos. 1 to 10 ...	3,957,079	3,569,515	3,876,812
11	386,234	768,380	1,159,745
12	1,127,108	1,025,509	1,181,529
13	276,981	307,084	709,104
14	641,007	817,215	747,092
15	224,275	81,552	114,237
16	720,047	1,324,858	1,410,287
17	370,014	345,657	414,552
18	438,770	1,108,809	1,603,709
19	671,314	465,108	276,836
20	2,057,573	4,211,287	6,246,862
TOTAL Nos. 11 to 20 ...	6,913,323	10,455,459	13,863,953
21	818,295	1,404,640	1,342,114
22	488,993	699,582	1,069,081
23	32,249	212,085	226,000
24	171,604	240,525	146,066
25	3,564	.....	280
26	138,225	232,830	213,894
27	.....	.....	.....
28	139,751	296,886	319,893
29	.....	.....	.....
30	128,306	184,818	159,634
TOTAL Nos. 21 to 30 ...	1,920,987	3,271,366	3,476,962
31	.....	.....	.....
32	72,204	94,834	129,066
33	.....	16,160	19,953
34	67,126	13,478	66,802
35	.....	.....	.....
36	.....	37	.....
37 to 39	.....	.....	.....
40	2,599	1,637	.....
TOTAL Nos. 31 to 40 ...	141,929	126,146	215,821
Above 40 ...	.....	.....	605
TOTAL ...	12,933,318	17,422,486	21,434,153

* Berar figures have been included in those for the Central Provinces with effect from the 1st October 1903.

No. 5.—DETAILED STATEMENT of the QUANTITY (in pounds and their equivalent in yards) and DESCRIPTION of WOVEN GOODS produced.

BOMBAY PRESIDENCY.

Description of Goods.		Twelve Months, 1st April to 31st March.		
		1901-02.	1902-03.	1903-04.
Grey Goods—				
Chadars	pounds	11,952,110	12,661,595	12,746,221
	yards	32,303,648	35,344,133	36,284,695
Dhutis	pounds	18,424,740	19,654,284	22,402,323
	yards	85,262,641	89,290,616	99,884,483
Drills and jeans	pounds	424,206	518,772	787,606
	yards	1,438,004	1,866,762	2,629,173
Jaconets	pounds	101,333	78,476	53,867
	yards	652,921	503,934	391,956
Madapollams	pounds	99,674	15,028	36,765
	yards	715,310	102,758	336,120
Mulls	pounds	24,460	17,159	2,450
	yards	131,808	122,592	17,706
Printers	pounds	963,260	1,678,299	2,984,697
	yards	4,756,078	7,848,321	14,065,171
Shirtings and longcloths	pounds	32,566,683	29,900,036	35,139,761
	yards	138,352,195	126,638,313	147,101,738
T. Cloths, domestics and sheetings	pounds	15,361,426	14,166,284	14,128,573
	yards	73,024,415	66,876,562	67,962,301
Other kinds...	pounds	4,509,233	5,035,916	4,525,542
	yards	15,739,696	17,877,470	17,311,971
TOTAL	pounds	84,427,125	83,723,849	92,807,803
	yards	352,376,716	346,471,461	385,985,314
White and Coloured Goods	pounds	13,660,504	16,275,621	19,273,091
Hosiery	"	457,951	466,148	635,511
	yards	.....	.....	1,170
	dozens	49,612	39,734	38,998
TOTAL	pounds	98,545,580	100,465,618	112,716,333

BOMBAY ISLAND.

Description of Goods.		Twelve Months, 1st April to 31st March.		
		1901-02.	1902-03.	1903-04.
Grey Goods—				
Chadars	pounds	9,703,062	9,532,429	9,330,235
	yards	25,646,165	25,984,772	25,811,172
Dhutis	pounds	5,232,383	3,993,549	3,519,969
	yards	23,937,852	18,332,443	15,981,478
Drills and jeans	pounds	422,324	510,330	762,663
	yards	1,432,694	1,841,370	2,534,999
Jaconets	pounds	21,270	27,199	1,204
	yards	120,364	147,080	13,818
Madapollams	pounds	76,342	10,285	36,763
	yards	603,130	87,742	336,120
Mulls	pounds	6,690	12,500	223
	yards	34,845	91,200	1,298
Printers	pounds	52,963	119,679	134,201
	yards	181,039	520,915	625,523
Shirtings and longcloths	pounds	24,989,924	22,407,009	24,251,095
	yards	109,220,394	98,282,557	106,190,135
T cloths, domestics and sheetings	pounds	13,188,932	12,052,668	11,310,094
	yards	62,296,493	55,948,318	54,017,331
Other kinds	pounds	2,982,982	3,396,156	3,317,999
	yards	9,768,167	12,143,882	13,065,778
TOTAL	pounds	56,676,822	52,061,804	52,664,446
	yards	233,241,143	213,380,279	218,577,652
White and Coloured Goods	pounds	13,277,179	15,797,772	17,066,008
Hosiery	"	457,950	466,148	635,511
	yards	.....	.....	1,170
	dozens	49,612	39,734	38,998
TOTAL BOMBAY ISLAND...	pounds	70,411,951	68,325,724	70,365,965

No. 5.—DETAILED STATEMENT of the QUANTITY (in pounds and their equivalent in yards) and DESCRIPTION of WOVEN GOODS produced—continued.

AHMEDABAD.

Description of Goods.		Twelve Months, 1st April to 31st March.		
		1901-02.	1902-03.	1903-04.
Grey Goods—				
Chadars	pounds	1,758,509	2,727,982	2,606,437
	yards	5,364,363	8,295,576	8,271,228
Dhutis	pounds	11,118,354	13,864,467	16,623,522
	yards	51,978,533	63,196,282	74,750,609
Drills and jeans	pounds	1,371	7,895	13,896
	yards	3,768	23,831	41,628
Jaconets	pounds	68,120	42,267	35,970
	yards	464,344	307,466	284,558
Madapollams	pounds	19,441	5	.....
	yards	90,691	40	.....
Mulls	pounds	17,749	4,647	1,522
	yards	97,060	31,334	11,228
Printers	pounds	760,910	950,327	1,997,409
	yards	3,823,540	4,377,312	9,982,667
Shirtings and longcloths	pounds	2,812,853	3,168,698	5,099,282
	yards	12,301,637	15,375,184	20,789,847
T cloths, domestics and sheetings	pounds	987,261	966,333	1,020,725
	yards	5,265,191	5,350,687	6,610,377
Other kinds	pounds	1,287,004	1,338,049	752,445
	yards	2,025,855	1,968,245	2,626,226
TOTAL	pounds	18,831,572	23,070,670	28,151,208
	yards	81,414,982	98,925,957	123,368,368
White and Coloured Goods	pounds	223,079	237,721	525,119
Hosiery	,,	.....	.....	.....
TOTAL AHMEDABAD	,,	19,054,651	23,308,391	28,676,327

MADRAS.

Description of Goods.		Twelve Months, 1st April to 31st March.		
		1901-02.	1902-03.	1903-04.
Grey Goods—				
Chadars	pounds	696	2,690	678
	yards	2,784	10,540	1,325
Dhutis	pounds	234,139	234,610	224,609
	yards	871,617	840,843	772,473
Drills and jeans	pounds	282,518	321,206	494,605
	yards	828,290	891,913	1,459,410
Jaconets	pounds	.....	.....	.....
	yards	.....	.....	.....
Madapollams	pounds	.....	.....	.....
	yards	.....	.....	.....
Mulls	pounds	.....	.....	.....
	yards	.....	.....	.....
Printers	pounds	.....	.....	.....
	yards	.....	.....	.....
Shirtings and longcloths	pounds	6,782	103,408	111,960
	yards	24,324	347,452	416,652
T. Cloths domestics and sheetings	pounds	1,138,778	1,056,585	792,594
	yards	3,917,446	3,601,101	2,647,677
Other kinds	pounds	509,107	356,907	306,476
	yards	1,205,669	726,743	698,115
TOTAL	pounds	2,172,020	2,075,406	1,930,922
	yards	6,850,130	6,418,592	5,995,652
White and Coloured Goods	pounds	3,901,302	2,919,663	3,412,654
Hosiery	,,	.....	.....	.....
	yards	.....	.....	.....
	dozens	.....	.....	.....
TOTAL	pounds	6,073,322	4,995,069	5,343,576

No. 5.—DETAILED STATEMENT of the QUANTITY (in pounds and their equivalent in yards) and DESCRIPTION of WOVEN GOODS produced—continued.

BENGAL.

Description of Goods.		Twelve Months, 1st April to 31st March.		
		1901-02.	1902-03.	1903-04.
Grey Goods—				
Chadars	pounds	52,206	83,475	136,199
	yards	176,658	346,092	427,822
Dhutis	pounds	68,203	71,657	181,288
	yards	311,749	328,580	783,394
Drills and jeans	pounds	266	60	3,070
	yards	401	216	8,946
Jaconets	pounds	.....	.....	.....
	yards	.....	.....	.....
Madapollams	pounds	.....	.....	.....
	yards	.....	.....	.....
Mulls	pounds	.....	.....	.....
	yards	.....	.....	.....
Printers	pounds	.....	56	.....
	yards	.....	204	.....
Shirtings and longcloths	pounds	29,585	65,734	86,205
	yards	120,573	203,880	323,756
T Cloths, domestics and sheetings	pounds	146,073	76,704	131,366
	yards	622,689	371,641	828,620
Other kinds	pounds	12,207	18,397	35,518
	yards	76,644	90,601	190,021
TOTAL	pounds	308,540	316,583	572,646
	yards	1,308,714	1,341,214	2,562,559
White and Coloured Goods	pounds	84,306	98,273	117,169
Hosiery	"	.....	.....	.....
TOTAL	"	392,846	414,856	690,815

UNITED PROVINCES of AGRA and OUDH (also AJMER-MERWARA).

Description of Goods.		Twelve Months, 1st April to 31st March.		
		1901-02.	1902-03.	1903-04.
Grey Goods—				
Chadars	pounds	15,399	8,852	87,176
	yards	36,659	27,664	197,005
Dhutis	pounds	1,860,590	1,402,862	1,466,072
	yards	7,283,915	5,812,513	6,154,537
Drills and jeans	pounds	286,937	248,237	344,516
	yards	793,791	667,151	918,584
Jaconets	pounds	.....	.....	.....
	yards	.....	.....	.....
Madapollams	pounds	.....	.....	.....
	yards	.....	.....	.....
Mulls	pounds	.....	.....	1,057
	yards	.....	.....	6,745
Printers	pounds	.....	180,855	123,734
	yards	.....	691,094	479,175
Shirtings and longcloths	pounds	700,453	1,186,482	1,122,536
	yards	2,861,008	4,270,200	4,455,674
T- Cloths, domestics and sheetings	pounds	725,039	688,004	1,511,344
	yards	2,101,024	2,066,786	5,003,556
Other kinds	pounds	820,519	150,218	315,670
	yards	3,044,064	448,953	1,106,177
TOTAL	pounds	4,408,927	3,815,510	4,972,104
	yards	16,120,461	13,984,361	18,321,453
White and Coloured Goods	pounds	128,881	770,017	521,763
Hosiery	yards	.....	.....	.....
TOTAL	pounds	4,537,808	4,585,527	5,493,867

No. 5.—DETAILED STATEMENT of the QUANTITY (in pounds and their equivalent in yards) and DESCRIPTION of WOVEN GOODS produced—continued.

PANJAB.

DESCRIPTION.		TWELVE MONTHS, 1st APRIL to 31st MARCH.		
		1901-02.	1902-03.	1903-04.
Grey Goods—				
Chadars	pounds	.....	8,195	1,102
	yards	.....	25,976	2,552
Dhutis	pounds	127,858	50,115	26,824
	yards	383,950	147,522	80,986
Drills and jeans	pounds	39	352	975
	yards	120	1,000	2,748
Jaconets	pounds	.....	.....	.....
	yards	.....	.....	.....
Madapollams	pounds	.....	.....	.....
	yards	.....	.....	.....
Mulls	pounds	.....	.....	145
	yards	.....	.....	1,105
Printers	pounds	.....	.....	.....
	yards	.....	.....	.....
Shirtings and longcloths	pounds	.....	.....	.....
	yards	.....	.....	.....
T. Cloths, domestics and sheetings	pounds	76,448	74,395	25,197
	yards	222,629	232,232	78,091
Other kinds	pounds	62,672	2,441	3,545
	yards	113,769	5,776	8,319
TOTAL	pounds	267,017	135,498	57,788
	yards	720,468	412,306	173,801
White and Coloured Goods	pounds	5,678	42,012	7,139
Hosiery	„	.....	.....	.....
TOTAL PANJAB	„	272,695	177,510	64,927

CENTRAL PROVINCES AND BERAR (*a*).

DESCRIPTION.		TWELVE MONTHS, 1st APRIL to 31ST MARCH.		
		1901-02.	1902-03.	1903-04.
Grey Goods—				
Chadars	pounds	521,016	810,462	741,435
	yards	1,535,254	2,309,843	2,016,630
Dhutis	pounds	958,349	725,496	1,216,984
	yards	4,271,198	3,318,100	5,383,408
Drills and jeans	pounds	89,893	120,354	174,157
	yards	269,431	373,870	507,391
Jaconets	pounds	.....	.....	.....
	yards	.....	.....	.....
Madapollams	pounds	.....	.....	.....
	yards	.....	.....	.....
Mulls	pounds	125	1,501	2,208
	yards	1,187	14,508	22,764
Printers	pounds	41,432	146,232	241,606
	yards	178,446	623,230	1,054,278
Shirtings and longcloths	pounds	1,350,905	1,289,459	1,572,786
	yards	5,469,360	5,009,147	6,313,267
T Cloths, domestics and sheetings	pounds	672,021	705,980	881,732
	yards	3,822,317	4,146,283	5,246,932
Other kinds	pounds	992,800	627,023	568,246
	yards	3,138,783	1,626,469	1,476,754
TOTAL	pounds	4,626,541	4,376,507	5,399,154
	yards	18,685,976	17,421,450	22,021,414
White and Coloured Goods	pounds	1,517,367	2,269,545	2,166,777
Hosiery	„	.....	.....	.....
TOTAL CENTRAL PROVINCES	„	6,143,908	6,646,052	7,565,931

(*a*) The figures for Berar are included from the 1st October 1903, those for earlier periods being shown in table No. 6.

No. 5.—DETAILED STATEMENT of the QUANTITY (in pounds and their equivalent in yards) and DESCRIPTION of WOVEN GOODS produced—concluded.

TOTAL OF BRITISH INDIA.

DESCRIPTION.		TWELVE MONTHS, 1ST APRIL to 31ST MARCH.		
		1901-02.	1902-03.	1903-04.
Grey Goods—				
Chadars	pounds ...	12,541,427	13,575,269	13,712,811
	yards ...	34,055,003	38,064,248	38,930,029
Dhutis	pounds ...	21,673,880	22,139,024	25,518,100
	yards ...	98,385,070	99,737,974	113,059,281
Drills and jeans	pounds ...	1,083,859	1,208,981	1,804,928
	yards ...	3,330,037	3,800,912	5,526,252
Jaconets	pounds ...	101,333	78,476	53,867
	yards ...	652,921	503,934	391,956
Madapollams	pounds ...	99,674	13,028	36,763
	yards ...	715,310	102,758	336,120
Mulls	pounds ...	24,585	18,660	5,860
	yards ...	132,995	137,100	48,310
Printers	pounds ...	1,004,692	2,005,442	3,350,037
	yards ...	4,934,524	9,162,849	15,598,624
Shirtings and longcloths	pounds ...	34,654,408	32,445,119	38,033,248
	yards ...	146,827,460	136,468,992	158,611,087
T. cloths, domestics and sheetings.	pounds ...	18,119,775	16,767,952	17,470,806
	yards ...	83,710,520	77,294,605	81,767,177
Other kinds	pounds ...	6,906,537	6,191,402	5,754,997
	yards ...	23,318,625	20,776,012	20,791,357
TOTAL	pounds ...	96,210,170	94,443,353	105,741,417
	yards ...	396,062,465	386,049,384	435,060,193
White and Coloured Goods.	pounds ...	19,298,038	22,375,131	25,498,521
Hosiery	" ...	457,951	466,148	635,511
	yards ...	.....	.....	1,170
	dozens ...	49,612	39,734	38,998
TOTAL	pounds ...	115,966,159	117,284,632	131,875,449

No. 6.—DETAILED STATEMENT of the QUANTITY (in pounds and their equivalent in yards) and DESCRIPTION of WOVEN GOODS produced.

BERAR (a), NATIVE STATES and FOREIGN TERRITORY.

Description.		Twelve Months, 1st April to 31st March.		
		1901-02.	1902-03.	1903-04.
Grey Goods—				
Chadars	pounds ...	232,627	273,373	341,949
	yards ...	530,722	819,198	998,968
Dhutis	pounds ...	835,755	1,082,044	1,143,274
	yards ...	3,557,877	4,585,022	4,726,317
Drills and jeans	pounds ...	98,163	151,868	47,782
	yards ...	317,237	473,372	135,359
Jaconets	pounds ...	.....	.....	.....
	yards ...	.....	.....	.....
Madapollams	pounds ...	.....	.....	.....
	yards ...	.....	.....	.....
Mulls	pounds ...	.....	.....	.....
	yards ...	.....	.....	.....
Printers	pounds ...	120,792	338,283	691,323
	yards ...	529,393	1,408,618	3,035,514
Shirtings and longcloths	pounds ...	840,082	1,418,617	1,149,590
	yards ...	3,460,348	5,581,086	4,677,758
T. cloths, domestics and sheetings ...	pounds ...	397,507	1,075,501	1,592,729
	yards ...	2,199,014	4,943,862	5,996,580
Other kinds	pounds ...	821,476	709,781	785,545
	yards ...	3,087,937	2,456,175	2,760,574
Total ...	pounds ...	3,346,402	5,049,467	5,752,192
	yards ...	13,682,528	20,267,333	22,331,070
White and Coloured Goods	pounds ...	338,124	439,915	415,753
Hosiery	,, ...	.....	.....	.....
Total	,, ...	3,684,526	5,489,382	6,167,945

(a) Berar figures have been included in those for the Central Provinces with effect from the 1st October 1903.

No. 7.—STATEMENT of the AMOUNT (in Rupees) of EXCISE DUTY assessed on goods woven in the Cotton Mills in India, under the Cotton Duties Act II of 1896.

	1898-99.	1899-1900.	1900-01.	1901-02.	1902-03.	1903-04.
British India.						
Bombay	11,26,390	10,95,236	10,28,542	15,26,103	15,84,121	17,64,526
Madras	89,130	88,678	41,827	54,139	67,813	62,349
Bengal	900	2,523	5,038	5,863	6,605	10,908
United Provinces of Agra and Oudh (also Ajmer-Merwara)	61,000	54,818	50,116	69,284	74,023	89,191
Panjab	12,730	10,448	5,806	4,379	3,031	1,104
Central Provinces... ...	84,969	88,109	84,978	1,10,140	1,21,664	1,32,386
Berar (*a*)	.....	.....	.....	.....	8,956	16,985
TOTAL, GROSS DUTY ...	13,75,119	13,39,812	12,16,307	17,69,908	18,66,213	20,77,449
„ NET DUTY ...	13,53,120	13,09,514	11,62,947	17,16,836	18,25,469	20,36,106
Foreign Territory.						
Berar (*a*) and the Native States of Indore, Mysore, Baroda, Nandgaon and Bhavnagar—						
GROSS DUTY ...	52,186	40,937	48,449	61,171	65,541	59,061
NET DUTY ...				61,129		59,045
GRAND TOTAL, GROSS DUTY	14,27,305	13,80,749	12,64,756	18,31,079	19,31,754	21,36,510
„ NET DUTY...	14,05,306	13,50,451	12,11,396	17,77,965	18,91,010	20,95,151

(*a*) Collections in Berar have been entered under British India from the 1st October 1902, from which date the province was leased in perpetuity to the British Government.

BOMBAY
MILLOWNERS' ASSOCIATION.

COTTON SPINNING AND WEAVING MILLS WORKING
AND
IN COURSE OF ERECTION IN INDIA
ON
30th JUNE 1903.

FREDERICK NOEL-PATON,
Secretary.

REPORT

OF THE

BOMBAY MILLOWNERS' ASSOCIATION

FOR THE YEAR 1904.

PRESENTED TO THE ANNUAL GENERAL MEETING
HELD ON 19th APRIL, 1905.

Bombay:
PRINTED AT THE TIMES PRESS.

1905.

CONTENTS.

PAGE

MEMBERS AND COMMITTEE OF THE ASSOCIATION—

Rules and Regulations of the Association i
Rules for Primary Registration of Trade-Marks vi
Rules for the Secondary Registration of Trade-Marks already registered under the Old Rules ix
Rules applicable to all Trade-Marks registered with the Association whether under the Old or the New Rules xi
Rules for the Election of a Representative of the Association on the Board of the Victoria Jubilee Technical Institute xii
Rules for the Election of a Representative of the Association to serve on the Board of the Bombay Improvement Trust xiii

REPORT OF THE COMMITTEE—

Trade Classifications of Cotton in Crop Statistics ... ... 1—40
Discrepancy in Cotton Statistics 2
Cotton: Yield, Exports and Mill Consumption 3
Progress of the Mill Industry 4
Comparison of Cotton Consumption and Yarn Production, nine years, 1895-96 to 1903-04 6
New Markets for Indian Goods 12
Cotton Prices 13
Silver and the China Exchange in 1904 14
Silver and the China Exchanges since 1894 14
Use of Salt in Manufacturing Processes 15
Accidents in Mills 15
Short Time Movement ... ... 16—42
Holidays and Sundays in Mills ... ... 16—43
Cotton Tares at Mills 17
Upper India Trade with Bombay and Calcutta 17
Technical Education ... ... 18—44
Ventilation of Factories 19
Factories Act—Shuttle Guards ... ... 20—47
Bombay's Railway Communications ... ... 20—48
Short Reeling of Yarns in Indian Mills ... ... 21—87
Representation of the Association on the Board of the Victoria Jubilee Technical Institute ... ... 23—102
Yarn Rates of Freight to China ... ... 24—107
Cotton Cultivation ... ... 25—108
Agricultural Conference 27
Registration of Trade-Marks in China ... ... 28—120
Proposed Commercial Mission to Persia ... ... 28—124
Conference of Chambers of Commerce of India and Ceylon ... ... 29—127
Donation to the J. J. Hospital Nursing Fund 32
Revision of Tariff Values under the Indian Cotton Duties Act 32
Income Tax and the Depreciation on Factory Buildings ... ... 34—130

REPORT OF THE COMMITTEE—*contd.* PAGE

Registration of Trade-Marks—Amendment of Association's Rules ... ... 35—133
Changes in Committee 36
Electric Power Project ... ... 37—142
Moisture in Cotton and Cotton Yarn ... ... 37—144
Exchange with the Further East 38
Holidays for 1905 38
Stocks of Cotton in Bombay 38
Balance Sheet 39
Proceedings of the Annual General Meeting 153
Bombay Municipality Water Rules for 1905-06 166
Report on the Cotton Mills of China by Mr. J. W. Jamieson, British Commercial Attaché in China 169
Statistics ... ... 38—179
Statement of Cotton Spinning and Weaving Mills working and in course of erection in India on 30th June 1904. ... ...

BOMBAY MILLOWNERS' ASSOCIATION.

ESTABLISHED 1ST FEBRUARY, 1875.

List of Members.

ADAMJEE PEERBHOY SPINNING AND MANUFACTURING MILLS.
ALLIANCE COTTON MANUFACTURING COMPANY, LIMITED.
APOLLO MILLS.
BENGAL-NAGPORE MILLS COMPANY, LIMITED.
BERAR MANUFACTURING COMPANY, LIMITED.
BOMBAY COTTON PRESS COMPANY, LIMITED.
BOMBAY COTTON MANUFACTURING COMPANY, LIMITED.
BOMBAY UNITED SPINNING AND WEAVING COMPANY.
CENTRAL INDIA SPINNING, WEAVING AND MANUFACTURING COMPANY, LIMITED.
CENTURY SPINNING AND MANUFACTURING COMPANY, LIMITED.
CHINA MILLS, LIMITED.
CONNAUGHT MILLS COMPANY, LIMITED.
COLABA LAND AND MILL COMPANY, LIMITED.
CORAL MILLS COMPANY, LIMITED.
CRESCENT MILLS COMPANY, LIMITED.
CURRIMBHOY MILLS COMPANY, LIMITED.
DAVID MILLS COMPANY, LIMITED.
E. D. SASSOON MILL.
ELPHINSTONE MILL.
EMPEROR EDWARD SPINNING, WEAVING AND MANUFACTURING COMPANY, LIMITED.
EMPRESS SPINNING AND WEAVING COMPANY, LIMITED.
FRAMJEE PETIT SPINNING AND MANUFACTURING COMPANY, LIMITED.
GODAVERY VALLEY GINNING AND PRESSING COMPANY, LIMITED.
GOKAK WATER POWER AND MANUFACTURING COMPANY, LIMITED.
HINDOOSTAN SPINNING AND WEAVING MILLS COMPANY, LIMITED.
HOWARD AND BULLOUGH MILLS COMPANY, LIMITED.
HYDERABAD (DECCAN) SPINNING AND WEAVING COMPANY, LIMITED.
IMPERIAL COTTON MILLS COMPANY, LIMITED.
INDIAN MANUFACTURING COMPANY, LIMITED.
INDO-CHINA MANUFACTURING COMPANY, LIMITED.
JAMES GREAVES MILLS COMPANY, LIMITED.
JAMSHED MANUFACTURING COMPANY, LIMITED.
JEWRAJ BALLOO SPINNING AND WEAVING COMPANY, LIMITED.
JUBILEE MANUFACTURING COMPANY, LIMITED.
JULGAON COTTON GINNING COMPANY, LIMITED.
KHANDEISH SPINNING AND WEAVING MILLS COMPANY, LIMITED.
KHATAO MAKANJI SPINNING AND WEAVING COMPANY, LIMITED.
KOHINOOR MILLS COMPANY, LIMITED.
LAKHMIDAS KHIMJEE SPINNING AND WEAVING COMPANY, LIMITED.
LAXMI COTTON MILLS COMPANY, LIMITED.
LEOPOLD SPINNING, BLEACHING AND MANUFACTURING COMPANY, LIMITED.
LORD REAY MANUFACTURING COMPANY, LIMITED.
MADHAVJEE DHARAMSEY MANUFACTURING COMPANY, LD.
MADRAS UNITED S. AND W. COMPANY, LIMITED.
MADURA MILLS, LIMITED.
MANOCKJEE PETIT MANUFACTURING COMPANY, LIMITED.
MOON MILLS, LIMITED.
MORARJEE GOCULDAS SPINNING AND WEAVING COMPANY, LIMITED.
MUIR MILLS COMPANY, LIMITED.
NEW EMPRESS SPINNING AND WEAVING COMPANY, LD.
NEW GREAT EASTERN SPINNING AND WEAVING COMPANY, LIMITED.
NICOL MILLS.
OOMRI GINNING AND PRESSING COMPANY, LIMITED.
PARBHANI GINNING AND PRESSING COMPANY, LIMITED.
PHŒNIX MILLS, LIMITED.
PRESIDENCY MILLS COMPANY, LIMITED.
PULGAON COTTON SPINNING, WEAVING AND MANUFACTURING COMPANY, LIMITED.
QUEEN SPINNING AND WEAVING COMPANY, LIMITED.
RAI SAHEB REKCHAND MOHTA SPINNING AND WEAVING MILL.
REHMANI MILL.
RIPON MANUFACTURING COMPANY, LIMITED.
SARASWATI MILLS COMPANY, LIMITED.
SASSOON SPINNING AND WEAVING COMPANY, LIMITED.
SETH BUNSILALL ABIRCHAND RAIBAHADUR'S SPINNING AND WEAVING MILL.
SHOLAPORE SPINNING AND WEAVING COMPANY, LIMITED.
SHRI GANGAJI COTTON MILLS COMPANY, LIMITED.
SOONDERDAS SPINNING AND WEAVING MILLS COMPANY, LIMITED.
SOUTHERN MARATHA S. AND W. COMPANY, LIMITED.
STANDARD MILLS COMPANY, LIMITED.
SWADESHI MILLS COMPANY, LIMITED.
SWAN MILLS, LIMITED.
TEXTILE MANUFACTURING COMPANY, LIMITED.
TRICUMDAS MILLS, LIMITED.
UNION MILLS, LIMITED.
VEERAMGAM SPINNING AND MANUFACTURING COMPANY, LIMITED.
VICTORIA MILLS.
WALLACE FLOUR MILLS COMPANY.
WESTERN INDIA SPINNING AND MANUFACTURING COMPANY, LIMITED.

COMMITTEE FOR 1905.

SASSOON J. DAVID, ESQ. (*Chairman*).
THE HON'BLE MR. VITHALDAS DAMODHER THACKERSEY (*Deputy Chairman*).
S. A. NATHAN, ESQ.
AHMEDBHAI HUBIBBHOY, ESQ.
DINSHAW E. WACHA, ESQ.
J. F. BRADBURY ESQ.
DWARKADAS DHARAMSEY, ESQ.
MANMOHANDAS RAMJEE, ESQ.
BOMONJEE DINSHAW PETIT, ESQ.
N. B. SAKLATWALA, ESQ.
SIR DINSHAW M. PETIT, BART.
MULRAJ KHATTAU, ESQ.
JAMSHEDJI ARDASEER WADIA, ESQ.
SIR J. COWASJEE JEHANGHIR.
NARANDAS PURSHOTUMDAS, ESQ.
N. N. WADIA, ESQ.
C. N. WADIA, ESQ.
H. E. E. PROCTER, ESQ.
HERBERT R. GREAVES, ESQ.
FAZULBHOY CURRIMBHOY EBRAHIM, ESQ.

Bombay Millowners' Association.

RULES AND REGULATIONS.

I.—The Association shall be called the Bombay Millowners' Association.

II.—The objects of the Association are—

(*a*) The protection of the interests of Millowners and users of steam, water $\frac{\text{and}}{\text{or}}$ electric power in India.

(*b*) The promotion of good relations between the persons and bodies using such power.

(*c*) The doing of all those acts and things by which these objects may be furthered.

III.—Any individual, partnership or Company owning one or more mill or mills or one or more factory or factories actuated by steam, water $\frac{\text{and}}{\text{or}}$ electric power shall be admissible to membership on $\frac{\text{his}}{\text{their}}$ paying in advance the annual subscription and on $\frac{\text{his}}{\text{their}}$ signing in the form prescribed in Section V an undertaking to conform to the Rules of the Association.

IV.—The subscriptions to be paid by any individual, partnership or Company on entering the Association shall be as follows :—

(*a*) Rupees 5 per annum for every 1,000 spindles $\frac{\text{and}}{\text{or}}$ Rs. 5 per every 100 looms set up in the mill or mills, factory or factories that at the time of subscription belong to the said individual, partnership or Company.

(*b*) Rupees 5 per annum for every Rs. 50,000 of the estimated value of machinery, buildings, $\frac{\text{and}}{\text{or}}$ land shown on the audited balance sheet of such factory or factories, not being Spinning and Weaving Mills, as may, at the time of subscription, belong to the said individual, partnership or Company.

Provided that the minimum subscriptions payable by any one member shall be Rs. 50 per annum.

V.—The **form of adherence** to the rules of the Association, to be signed by members as provided in Rule III, shall be as follows :—

In consideration of the protection afforded by the members of the Bombay Millowners' Association to the Trade-Mark and Tickets used by $\frac{me}{us}$ *and in consideration of the general maintenance by the Association of the interest of the industry in which* $\frac{I\ am}{we\ are}$ *engaged* $\frac{I}{we}$, ... *engaged in* ..... *in the town of* ..... *having carefully read and fully understood all the rules of the said Association, and the Rules relating to Registration of Trade-Marks, do hereby declare and agree that* $\frac{I}{we}$ *will during* $\frac{my}{our}$ *membership of the said Association in all things conform faithfully and absolutely to all the said rules and to such other rules as the Association shall institute by resolution duly passed in accordance with the relevant provisions herein, that* $\frac{I}{we}$ *will register with the Association all the Trade-Marks applied by* $\frac{me}{us}$ *to any the produce of the mill or mills, factory or factories, owned by* $\frac{me}{us}$, *that all Trade-Marks so applied by* $\frac{me}{us}$ *whether they be registered with the Association or not, shall be subject to the rules of the Association, that* $\frac{I}{we}$ *will submit to arbitration any dispute or disputes in which* $\frac{I}{we}$ *may be concerned with another member or members of the Association in respect of a Trade-Mark or Trade-Marks, and that* $\frac{I}{we}$ *will in all things endeavour to further the objects of the Association.*

VI.—Membership of the Association shall terminate on the expiry of three months' notice given to the Secretary in writing by a member of the Association of his intention to resign membership. Any member may, for any act done, or conduct pursued by such member, in contravention of the Rules of the Association or to its detriment or discredit, or injurious to its welfare and interests, be expelled from the Association by a majority of three-fourths of the members present at a general meeting specially convened by the Committee of the Association to consider the act or conduct in question, and a resolution passed by such majority that the act or conduct in question was in contravention of the Rules of the Association, or was detrimental or discreditable thereto or injurious to its welfare and interests, and that the member responsible for such act or conduct is expelled in consequence of the same, shall be in every respect conclusive. *Provided always* that, at some time before the passing of such resolution, the member responsible for the act or conduct complained of shall be afforded a full opportunity of being heard in defence or explanation in regard thereto.

VII.—Every individual, partnership or Company being a member of the Association shall have the right to give by its representative one vote on any motion put to a general meeting of the Association.

VIII.—The person or persons empowered to act and vote on behalf of an individual or partnership as a member of the Association shall be either a partner or a person signing *per procuration* for the said individual or partner. The person or persons empowered to act and vote on behalf of a public Company as a member shall be either one or more of the Board of Directors or the Agent, Secretary or Manager of the Company or that individual or a member of that firm which shall act as Secretary, Treasurer or Agent, or a person authorised by that individual or firm to sign *per procuration*.

IX.—The name or names of the person or persons empowered to vote on behalf of an individual, partnership or Company as a member of the Association shall be registered with the Association in order of precedence, and no person not so registered shall have power to so act or vote.

X.—If two or more individuals representing the same partnership or public Company be present at any meeting, only that one of the said individuals who takes priority in the order of precedence registered by the said partnership or Company with the Association shall vote. Provided always that the votes of a plurality of members represented by a single individual or partnership may be recorded either by one or more persons having the aforesaid qualifications to vote and being registered with the Association to that effect.

XI.—One-fourth of the members of the Association shall be a sufficient quorum to form any general meeting other than the annual general meeting provided for under Rule XXIII, when due notice of the intention to hold such meeting has been given in manner hereinafter set forth ; but if within thirty minutes after the time appointed for the meeting such quorum be not present, the meeting shall be adjourned to such time on the following day or other day as the members present may determine. Previous notice of such adjourned meeting to be given in one or more of the English and one or more of the Vernacular newspapers published in Bombay. If at such adjourned meeting the quorum be not present those members who are present shall be the quorum and may transact the business for which the meeting was called.

XII.—The affairs and funds of the Association shall be managed by a Committee of twenty members, consisting of a Chairman, a Vice-Chairman, and eighteen members, of whom seven members shall retire by rotation in each *year*, but be eligible for re-election. The appointment or re-appointment of members to fill these seven vacancies shall be made at the Annual General Meeting of the Association.

XIII.--The Chairman of the Committee shall, if present, preside at all meetings of the Association or of the Committee held during his term of office. In the absence of the Chairman the Vice-Chairman shall preside, and failing both of these the Chair shall be taken by one of the members of the Committee to be appointed by the other members of the Committee present on the occasion.

XIV.—The names of the members whom it is proposed to appoint as Chairman and Vice-Chairman of the Committee for the ensuing year, as also the names of the seven members of Committee who retire but are eligible for re-election, shall be circulated amongst the members at least seven days before the Annual General Meeting and no two members of any one *firm* or *Company* shall be eligible to serve on the Committee at the same time. Provided always that the fact of a member's holding a share or shares in a Company represented by another member of Committee shall not prejudice any right he may possess under Rule VIII to vote on behalf of another firm or Company.

XV.—In case of a tie in voting either in Committee or in General Meeting the Chairman for the time being shall have a casting vote.

XVI.—In the event of the death or resignation of the Chairman or Vice-Chairman or of any member of the Committee, a fresh appointment shall be made by the Committee.

XVII.—Five members of the Committee present in person shall form a sufficient quorum at any meeting of the Committee.

XVIII.—The Committee shall meet at least once in every month, and oftener if need be.

XIX.—A Secretary shall be appointed by the members and his remuneration shall be fixed by the Committee. His duties shall be to keep the records and accounts of the Association, to collect subscription, paying the same into the Bank of Bombay, or such other bank as may be approved by the Committee in this behalf, to the credit of the Association's account, to consider all proposed legislative measures or any other matter that may affect the interest of the Association and generally to act in the Association's interest under the orders of the Committee.

XX.—Minutes of all proceedings of the Association in Committee or in General Meeting shall be made and entered regularly in a minute book to be kept by the Secretary. This book shall be open to the inspection of any members at any reasonable time.

XXI.—The Committee for the time being shall have the control of the funds of the Association, and pay all necessary expenses and generally manage its affairs. They may disburse money from the Association's funds either by way of loan or gift for the purpose of furthering any of the objects for the carrying out of which the Association is formed. They may advance money either by way of loan or gift to any member of the Association to assist him in conducting or defending a law suit or carrying on an arbitration if in their opinion the principles involved in the said suit or arbitration affect the interests of the members as a body, and they may do all other things calculated to promote the general objects of the Association. Provided always that no one sum exceeding Rs. 2,000 shall be advanced by way of loan or gift by the Committee without the sanction of a majority of the members present at a general meeting to be called to sanction such gift or loan, and that, if at any time during any year the disbursements of the Committee, after providing for ordinary expenditure, such as Secretary's salary, printing, stationery, &c., amount to seven-eighths of the funds remaining in hand, then the Committee shall call a general meeting and lay the accounts before the members of the Association. For every annual general meeting the Committee shall prepare a statement of the accounts of the Association which shall be circulated amongst the members seven days prior to the date of the meeting.

XXII.—The Committee may, from time to time, appoint a Sub-Committee or Sub-Committees to investigate and to report upon particular matters, and may invite any member of the Association not being a member of the Committee to act on such a Sub-Committee if for any special reason such a course may seem to them advisable. But a Sub-Committee shall have no executive or substantive power nor shall its recommendations be of any effect unless and until such recommendations are ratified by the Committee.

XXIII.—The Annual General Meeting of the Association shall be held at such time as the Committee may appoint, and the Committee may at any time call a general meeting should it seem to them expedient to do so. Seven days' notice of any annual general meeting and of any other general meeting, other than a general meeting adjourned under the circumstances contemplated by Rule XI, shall be given by an advertisement in one or more of the English and one or more of the Vernacular newspapers published in Bombay. Any four members may by a requisition addressed to the Committee and accompanied by a statement of reasons request them to call a general meeting of members, and the Committee on receipt of such a requisition shall call a meeting to be held on the earliest convenient day.

XXIV.—All the moneys or funds of the Association shall be paid into an account to be opened with the Bank of Bombay or such other Bank as may be approved by the Committee in this behalf in the name of the Association. All cheques on that account shall be signed by the Chairman, or in his absence by the Acting Chairman and one member of the Committee.

XXV.—Solicitors to the Association shall be appointed by the Committee who may advise with them when necessary.

XXVI.—Neither the Chairman, Vice-Chairman, nor any member of Committee nor the Secretary shall be answerable for anything other than his own acts or defaults nor shall he be answerable for any act done by him for the sake of conformity only, or for any moneys of the Association other than such as shall come into his own hands, or for any collector or receiver of moneys appointed by the Committee or for any misfortune, loss or damage happening to the Association by reason of any deed done or executed by him as a Chairman, Vice-Chairman or member of the Committee, or by reason of any error in judgment or mere indiscretion on his part in the performance of his duties, or otherwise on any account, except for wilful negligence or fraud. Every person being Chairman, Vice-Chairman, or a member of the Committee, his heirs, executors, or administrators, shall at all times be indemnified and saved harmless out of the funds of the Association from and against all costs, losses, damages and expenses whatsoever incurred or sustained by him in the execution of his powers or duties, and every person having been or being a Chairman, Vice-Chairman, or member of Committee or Secretary of the Association, his heirs, executors, and administrators, shall be indemnified and saved harmless, out of the funds of the Association, against all actions, suits, claims, and demands whatsoever, brought or made against him or them in respect of any engagement of the Association, save such as may be incurred by his own personal wilful neglect or default.

XXVII.—An annual report of the proceedings of the Association shall be prepared and printed for circulation amongst the members, and copies of this report may be sent to any similar Association or individuals or Corporations whom it may be likely to interest.

XXVIII.—These Rules shall come into force on the 1st day of January 1904. Up to that date the present Rules shall be in force. The foregoing Rules and copies of the form of undertaking prescribed under Rule V shall forthwith be printed and distributed to all members, and on and after the 1st day of October 1903 no member who has not duly signed and deposited with the Secretary the said form of undertaking shall be entitled to the privileges of membership. No alteration in these Rules shall be made save and except by a majority of

three-fourths of the members of the Association present at a general meeting duly convened for the purpose of considering such alteration, the terms of which shall be fully set forth in the notice convening the said general meeting.

*XXIX.—At the first Meeting of Committee after the holding of the Annual General Meeting the Committee shall in each year appoint three members of the Committee to form a Sub-Committee for the purpose of deciding questions, other than arbitrations, under the Rules of the Association for the Registration of Trade-marks. Decisions of the said Sub-Committee in such questions shall have the same effect as if given by the whole Committee. Vacancies in the said Sub-Committee shall be filled up by the Committee.

* *Note.*—Rule XXIX was passed at the Annual General Meeting of the Association held on 15th April 1904.

RULES FOR PRIMARY REGISTRATION OF TRADE-MARKS.

Definition.—Throughout all the Rules of the Association—

The word "trade-mark" shall be understood to include the word "ticket."

All grey and/or bleached cotton yarns or threads shall be regarded as belonging to one and the same "class of goods."

All cotton yarns or threads, coloured in whole or in part, shall be regarded as belonging to a distinct "class of goods."

All cotton cloths shall be regarded as belonging to a third distinct "class of goods."

1. Every member shall at the earliest convenient date, after the 1st of May 1903, send to the Secretary with an application for registration a copy of every trade-mark applied and/or intended to be applied by such member to any the produce of the mill or mills, factory or factories, owned by such member, together with *that number of* spare copies of each trade-mark which the Committee may from time to time prescribe in this behalf, regard being had to the total number of the membership, and shall attach to each such copy a writing showing the class or classes of goods to which the applicant desires to apply the trade-mark in question.

2. The Secretary shall send to every member one such spare copy of every trade-mark submitted for primary registration, and shall intimate that the trade-mark in question will in one month's time be registered for use on the class or classes of goods specified unless some member shall, in the interval, formally object to such registration on the ground that the trade-mark submitted is a colourable imitation of a trade-mark already registered by the objector with the Association for use on one or more the class or classes of goods specified and by such objector habitually applied to such class or classes of goods. After *three weeks' delay a reminder* shall be sent by the Secretary to such members as have not replied in the interval. At the end of *one month* from the original distribution of copies the trade-mark in question shall be registered for use on all such specified class or classes of goods in respect of which no objection has been raised by a writing duly delivered to the Secretary.

3. Prior registration with the Association under these new Rules of a trade-mark for use on a class or classes of goods specified to that effect at time of registration shall *prima facie* be held to secure to the member by whom such trade-mark has been so registered an exclusive right as against all other members of the Association to use the said trade-mark on the class or classes of goods so specified.

4. Any dispute arising out of an objection raised to the registration of a trade-mark, on the grounds stated in Rule 2, shall be referred to the *arbitration* of two disinterested parties, one to be chosen by each party to the dispute.

5. If the arbitrators disagree upon any issue or issues submitted to them, they shall refer the matter to an umpire to be agreed upon between them with the consent of their principals, and whose decision shall be final.

6. In any of the following cases :—

(*a*) if all the parties do not, after difference has arisen, proceed to the appointment of an arbitrator or arbitrators ;

(*b*) if an appointed arbitrator refuses to act or is incapable of acting or dies, and the party or parties do not supply the vacancy ;

(*c*) if the two arbitrators having disagreed fail to appoint within fourteen days a third arbitrator or umpire ;

(*d*) if an appointed umpire or third arbitrator refuses to act or is incapable of acting or dies and the parties or their arbitrators do not supply the vacancy ;

any party may serve the other party or parties with a notice, at the same time appointing an arbitrator, umpire or third arbitrator to supply the vacancy.

7. If such appointment be not agreed to $\frac{\text{and}}{\text{or}}$ the arbitration be not proceeded with within fourteen days after the service of the notice, the Committee may on application by either party, appoint an umpire or a Special Committee of Arbitration which shall consist of three members and which shall have the like power to act in the reference and to make an award as if they had been appointed by consent of all parties and the award of such umpire or Special Committee of Arbitration shall be final.

8. If both arbitrators or the umpire or Committee of Arbitration decide that the trade-mark submitted for registration is a colourable imitation in the sense alleged of one already registered with the Association for application to the class or classes of goods to which the trade-mark submitted is designed to be applied, registration shall not be made and the member who has submitted it for registration shall forthwith desist from using the said trade-mark on such class or classes of goods.

9. If both arbitrators or the umpire or Committee of Arbitration decide that the trade-mark submitted is not a colourable imitation in the sense alleged, registration shall be made.

10. A member who has objected to the registration of a trade-mark for use by another member or any specified class or classes of goods, and whose objection has been disallowed by both arbitrators or by an umpire or by a Committee of Arbitration, shall offer no further opposition to the use of the said trade-mark by the member in whose name it is registered so far as concerns the class or classes of goods for which it is so registered. But such abstention shall in no way prejudice or affect the right of a member whose objection has been disallowed to object to the registration of the same trade-mark for use on other class or classes of goods or to the registration of another ticket.

11. When the arbitrators or umpire have made an award, they or he shall sign it and forward it to the Committee of the Association ; and all such awards shall be recorded by the Association and given effect to in the Association's Register.

12. The Committee may remit any award to the re-consideration of an umpire and may appoint any reasonable time within which a fresh award must be made, failing which they may proceed on application by either party to appoint an umpire or a Committee of Arbitration as under Rule 6 hereof. From the time of the making of such an appointment the right of the original arbitrators or umpire to make a fresh award shall terminate and any award he or they may threafter make in the matter shall be void.

13. When an arbitrator or umpire has misconducted himself, the Committee may remove him or may quash the award in the making of which he was concerned and order or conduct a fresh arbitration.

14. The following fees shall be chargeable to members :—

(*a*) In cases where an umpire is appointed by the Committee under Rule 7 or 12, Rs. 15 only, of which Rs. 10 shall be paid by the Association to the said umpire. Such fee to be paid by the losing party.

(*b*) In cases where a Committee of Arbitration are appointed by the Committee, Rs. 35 only, of which Rs. 10 shall be paid to each member of the Committee of Arbitration. Such fee to be paid by the party applying for appointment of a Committee of Arbitration instead of an umpire.

15. Notwithstanding anything contained in the foregoing Rules or in the Form of Adherence prescribed under Rule 5 a member who has signed such Form of Adherence may, when sending in any trade-mark or trade-marks, for registration with the Association, declare that he is not willing to refer to arbitration any dispute or disputes that may arise between him and any other member or members of the Association with respect to any one or more of such

trade-marks (to be specified by him) on the ground that he has habitually applied the same to any the produce of a mill or mills, factory or factories owned by him. Provided that in the case of a member who shall at any time after the passing of this Rule have joined the Association for the first time, such declaration shall be made not later than one calendar month after his so joining the Association. Provided further that in the case of a member who first joined the Association at a date anterior to the passing of this Rule, such declaration shall be made not later than the 31st of May 1904, and shall be valid only if it relate to a trade-mark or trade-marks which he is able to show to the satisfaction of the Committee of the Association that he had before the 1st January 1904 habitually applied to any the produce of a mill or mills, factory or factories owned by him.

16. Trade-marks in respect of which such a declaration shall have been made in accordance with the provisions of the foregoing Rule 15 shall be subject to the procedure laid down in Rules 1 and 2 for Primary Registration. In case an objection in the terms of Rule 2 shall be made to the registration of such a trade-mark the Committee shall, in the case where the mark objected to is claimed by a newly joined member, release the parties interested, so far as the particular dispute in question is concerned, from their obligation to refer such dispute to arbitration ; but where the trade-mark objected to is claimed by an old member, the Committee shall grant such release on the production by such member of evidence satisfactory to the Committee of the Association that the trade-mark or trade-marks in question was or were before the 1st January 1904 habitually applied by him to any the produce of a mill or mills, factory or factories owned by him. When such release is granted the fact shall forthwith be communicated by the Committee to the parties to the dispute or disputes, and the registration of the trade-mark or trade-marks in disputes in the Ordinary Register shall be postponed for a period of two calendar months from the date of such communication. The trade-mark or trade-marks so objected to shall on the expiration of one calendar month from the date of the application to register the same be temporarily registered in a special register to be called the Suspense Register. So long as any such trade-mark shall remain on the Suspense Register of the Association, priority of registration thereof on the Suspense Register shall have the same effect as prior registration under Rule 3 for Primary Registration in so far as it shall entitle the owner of such trade-mark to object in accordance with Rule 2 to the registration of any other trade-mark that may be submitted for registration. At any time within the aforesaid period of two calendar months any of the parties to any such dispute may institute such proceedings, civil or criminal, in the matter as he may be advised, and the result of such proceedings, if instituted, shall be awaited by the Association. If in such proceedings any of the trade-marks in dispute, shall be held to be a colourable imitation of another of the trade-marks in dispute, then the trade-mark so held to be a colourable imitation shall be removed from the Suspense Register or from the Ordinary Register, as the case may be. If no legal proceedings in the matter shall be instituted by any of the parties to the disputes within the aforesaid period of two calendar months, or if legal proceedings having been instituted shall have been discontinued or finally decided in favour of the applicant for registration, then the trade-mark objected to shall be removed from the Suspense Register and registered in the Ordinary Register of the Association, unless other legal proceedings regarding the same mark shall be still undecided. The Association shall not alter the Suspense or Ordinary Register in respect of the disputed trade-mark except upon the application of one or more of the parties interested and upon what the Committee may deem sufficient evidence of the existence of the condition or conditions in this clause specified as justifying removal from or insertion in a register, as the case may be.

17. A trade-mark which is so transferred from the Suspense Register to the Ordinary Register shall be deemed to have been registered in the Ordinary Register as of the date when such trade-mark would have been registered therein had no objection to the registration thereof been taken.

Note.—Rules 15, 16 and 17 were passed at the Annual General Meeting of the Association held on 15th April 1904.

RULES FOR THE SECONDARY REGISTRATION OF TRADE-MARKS ALREADY REGISTERED UNDER THE OLD RULES.

A.—All members are requested to send in to the Secretary a complete set of the trade-marks registered by them under the old Rules. Ten copies of each trade-mark should be forwarded, and such copies may be marked "FOR SECONDARY REGISTRATION PURPOSES ONLY."

B.—Each trade-mark registered under the old Rules should be accompanied by a statement showing—

(*a*) The class or classes of goods, if any, to which, at time of Primary Registration, it was specifically declared that the ticket was to be applied.

(*b*) The class or classes of goods, if any, to which the applicability of the trade-mark was clearly indicated by words, letters $\frac{\text{and}}{\text{or}}$ figures forming a part of, or an adjunct to, the design.

(*c*) The class or classes of goods, if any, to which the trade-mark has, in fact, been habitually applied by the applicant for registration.

(*d*) The class or classes of goods to which the applicant desires to apply the trade-mark.

C.—The said trade-marks shall be compared by the Secretary with those on the existing register; and a Sub-Committee of two members shall be appointed to advise the Secretary. The said Sub-Committee may require from any member applying for registration of a trade-mark all necessary information and sufficient proof regarding any question of fact as to the class or classes of goods to which any trade-mark has been habitually applied.

D.—Registration of a trade-mark, under the old Rules of the Association, shall constitute registration under these present Rules. But the right established by such registration under the old Rules shall, under the new Rules, be defined and limited by the following considerations:—

(*a*) If at the time of registering a trade-mark under the old Rules, the member registering it has specifically declared the class or classes of goods to which the said trade-mark was to be applied, the said member shall be entitled by virtue of such registration to use the said trade-mark only for application to the class or classes of goods so specifically declared, $\frac{\text{and}}{\text{or}}$ to which he has habitually applied it, and shall not by virtue of such registration have any right to use the said trade-mark on any other class or classes of goods or be entitled to oppose the registration of a similar trade-mark by another member for application to another class or classes of goods.

(*b*) If a trade-mark registered by a member under the old Rules bear, as part or as an adjunct to the design, words, letters $\frac{\text{and}}{\text{or}}$ figures clearly indicating the class or classes of goods to which the said trade-mark was to be applied, the said member shall be entitled by virtue of such registration to use the said trade-mark only for application to the class or classes of goods so indicated, $\frac{\text{and}}{\text{or}}$ to which he has habitually applied it, and shall not by virtue of such registration have any right to use the said trade-mark for any other class or classes of goods or be entitled to oppose the registration of a similar trade-mark by another member for application to any other class or classes of goods.

(*c*) If a trade-mark registered under the old Rules do not bear, as part of, or as an adjunct to, the design, words, letters $\frac{\text{and}}{\text{or}}$ figures clearly indicating the class or classes of goods to which it was to be applied, and if such registration of such a trade-mark have not been accompanied by a specific declaration of the class or classes of goods to which it was to be applied, the member who so registered such a trade-mark shall be entitled by virtue of such registration to register the said trade-mark under the new Rules for use only on such the class or classes of goods to which he can show that he has, in fact, habitually applied it, and shall not have any right by virtue of such registration under the old Rules to oppose the registration of a similar trade-mark by another member for use on any other class or classes of goods.

(*d*) Provided that any member whose right of user in a trade-mark by virtue of registration under the old Rules is limited as above to application to a certain class or classes of goods may submit the said trade-mark to be registered for use on any other class or classes of goods, and such submission for registration shall be dealt with in accordance with the new Rules for Primary Registrations.

Note.—**The following Resolutions were adopted at the Annual General Meeting of the Association held on 15th April 1904 :—**

(1) Rules A, B and C of the Association's Rules for the Secondary Registration of trade-marks are hereby rescinded with effect from the 1st of November 1904 : that on and after the said 1st of November the Old Register of trade-marks shall be null and void and that those trade-marks standing on the said Old Register and in respect of which registration under the Rules for Secondary Registration shall not have been completed by the 31st October 1904, shall thereafter be admissible only in conformity with the Rules for Primary Registration. Further, that Rule D down to the word " considerations " is hereby rescinded and the following words substituted : the Rule so amended becoming Rule A :—" The right established by Secondary Registration if duly effected before the 1st November 1904 shall be defined and limited by the following considerations."

(2) That the following Ruling of Committee be added to the Rules for Secondary Registration of trade-marks :—

B. " That if membership of the Association in respect of a mill or mills shall have terminated, whether through failure to pay dues or otherwise, and if on the revival of membership in respect of such mill or mills, whether by the original owners or otherwise, and whether under the original name or otherwise, it shall be found that during the interval when the membership was in abeyance there have been registered with the Association a trade-mark or trade-marks alleged by the person reviving the membership to be a colourable imitation of a trade-mark or trade-marks previously registered with the Association by the mill or mills in respect of which membership is revived, then the owner or agent of such mill or mills shall have the right to protest at any time within fourteen days of the revival of membership against the registration already made of the trade-mark or trade-marks in question, and if necessary to demand arbitration, either under Rule 4 or under Rule 7 ; and the award in such cases shall be binding on the parties and shall be given effect to in the Register of the Association."

RULES APPLICABLE TO ALL TRADE-MARKS REGISTERED WITH THE ASSOCIATION, WHETHER UNDER THE OLD OR THE NEW RULES.

(A)—All questions of fact as to the class or classes of goods to which a trade-mark has been habitually applied shall be decided by arbitration in accordance with the procedure laid down in that behalf in the new Rules for first registrations.

(B)—If two or more members shall have registered with the Association trade-marks which are found in practice to resemble each other so far as to cause inconvenience, such members may jointly refer the matter to arbitration for a decision as to their respective claims to the exclusive right of user, each party appointing his own arbitrator. Should such arbitrators not agree, the matter may, on joint application of both or all the disputants, be referred by the Committee of the Association to a Sub-Committee to be specially appointed for the purpose of the single arbitration. Such application must be accompanied (*a*) by a clear statement of the issues to be decided; (*b*) a written undertaking by all the parties jointly or severally to abide by the award to be given; (*c*) a fee of Rs. 20 from each party. On receipt of such application and accompaniments the Committee shall appoint a Special Sub-Committee of three members in accordance with No. 6 of the new Rules for first registrations, whose award shall be final. Such awards shall be recorded by the Association and given effect to in the Association's Register.

(D)—In arbitrations, as to exclusive or prior right of user in any trade-mark for any or all class or classes of goods, the following considerations shall be considered decisive in the degrees indicated by the number of points hereunder assigned to each :—

(*a*) Specific DECLARATION at time of registration of the class or classes of goods to which the trade-mark was to be applied ... ... 5 POINTS.

(*b*) Clear INDICATION by words, letters or figures on the trade-mark of the class or classes of goods to which it was to be applied ... ... 3 POINTS.

(*c*) PRIORITY of registration without either declaration or indication of the class or classes of goods to which the trade-mark was to be applied ... ... 2 POINTS.

Provided always that if the member who has registered a trade-mark $\frac{\text{and}}{\text{or}}$ who can prove declaration $\frac{\text{and}}{\text{or}}$ indication of the class or classes of goods to which it was to be applied, can prove also that he has, in fact, habitually applied the said trade-mark to any or all of the said class or classes of goods, the points above assigned to such declaration or to such indication, as the case may be, shall be squared in so far as relates to the class or classes of goods to which the trade-mark has, in fact, been habitually applied.

Example : Thus a member who first registered a trade-mark, whose trade-mark fulfilled the conditions of indication as above defined, who further, at the time of registration, specifically declared the class or classes of goods to which it was to be applied, and who proves that he has, in fact, habitually applied the said trade-mark to the said class or classes of goods or to any of them, would be entitled to the following points in respect of each and all of the said conditions so far as relates to the class or classes of goods to which the trade-mark has, in fact, been habitually applied :—

(*a*) DECLARATION,	5	POINTS	squared	in	consideration	of use	25	POINTS.
(*b*) INDICATION,	3	,,	,,	,,	,,	,,	9	,,
(*c*) PRIORITY,	2	,,	,,	,,	,,	,,	4	,,
						Total ...	38	POINTS.

(Δ)—If there shall be on the Association's Register two trade-marks, either of which might reasonably be held to be a colourable imitation of the other, but registration of which was in each case accompanied by specific declaration of the class or classes of goods to which it was to be applied, or both of which trade-marks bear words, letters or figures clearly indicating applicability to any or all the same class or classes of goods, or either of which trade-marks bears words, letters or figures clearly indicating its applicability to any or all the class or classes of goods for which the other trade-mark was specifically declared at time of registration or to which such other trade-mark has, in fact, been habitually applied, the fact of their so standing on the register shall be held to show that neither trade-mark was at time of primary registration considered to be a colourable imitation of the other. And if the owner of one of the said trade-marks shall on the ground of colourable imitation, oppose an application for the registration of the other of the said trade-marks for use on any or all the class or classes of goods not declared or indicated at time of original registration, such opposition shall be disallowed, unless both parties agree under Rule *B* to refer the matter to arbitration.

RULES FOR THE ELECTION OF A REPRESENTATIVE OF THE ASSOCIATION ON THE BOARD OF THE VICTORIA TECHNICAL INSTITUTE.

1. Any member of the Association shall be eligible as Representative of the Association on the Board of the Victoria Jubilee Technical Institute.
2. The period of office of any elected Representative of the Association on the Board of the said Institute shall be one of three years. At the end of such period he shall retire but may be re-elected.
3. The appointment of the Association's Representative shall be made at a general meeting of the Association and such representative shall *ex-officio* be a member of the Committee of the Association.
4. In the event of the disqualification of the Association's Representative under Section 9 or 10 of the Rules and Regulations of the said Institute, or in the event of the decease or resignation of such Representative, or in event of his ceasing for any reason to be a member of the Association, the Committee shall appoint a successor, who shall hold office up to that date at which the Representative whom he succeeds would, under Rule 2, have retired.
5. In the event of the absence of the Association's Representative from three or more consecutive meetings of the Board, or in the event of the Association's Representative applying for leave of absence, the Committee may, if they think fit and with the consent of the Board of the said Institute, appoint a substitute who shall hold office until the Representative whom he replaces resumes attendance or up to that date at which the Representative whom he replaces would, under Rule 2, have retired.

RULES FOR THE ELECTION OF A REPRESENTATIVE OF THE BOMBAY MILLOWNERS' ASSOCIATION TO SERVE ON THE BOARD OF TRUSTEES UNDER THE PROVISIONS OF THE CITY OF BOMBAY IMPROVEMENT ACT, 1898.

(*Adopted at the General Meeting of Members held on 22nd September* 1898.)

1. Candidates shall be nominated in writing signed by one proposer and one seconder who must be both members of the Association, and the nomination papers must be sent in to the Secretary ten clear days before the day fixed for the election.

2. The Secretary of the Association shall circulate the names of the applicants four clear days before the election.

3. The Committee shall appoint two days, which shall be duly advertised, upon which the balloting shall take place. The ballot-box shall be open from 10 A.M. till 6 P.M. on each day.

4. Votes may be given either in person or through any one duly authorised by a member of the Association, each subscribing member being entitled to one vote only.

5. The Committee shall appoint two scrutineers who, at 6 P.M. on the second day of the ballot, shall open the box and declare the result.

6. The candidate who has the largest number of votes shall be declared duly elected.

7. In the event of an equality of votes preventing the due election of any of the candidates, the members of the Association shall vote afresh in the manner above laid down, the voting in such case to be confined to the candidates who have secured an equal number of votes.

8. In the event of a casual vacancy the above course shall be followed in the appointment of a substitute.

9. In the event of the temporary absence of a Representative of the Association on the Board of Trustees necessitating the appointment of a substitute under Section 13 (2), such appointment shall be made by a majority of the votes of the Committee of the Association at a meeting called for the purpose.

REPORT

OF THE COMMITTEE OF THE

BOMBAY MILLOWNERS' ASSOCIATION.

For the period from 1st January to 31st December 1904.

TRADE CLASSIFICATIONS OF COTTON IN CROP STATISTICS.

Modification at Instance of Bombay Chamber of Commerce.

In March 1904 the Committee were favoured by the Chamber of Commerce with a copy of certain papers received by them from the Director-General of Statistics to the Government of India on the subject of the adoption in Government Crop Reports, and more particularly in the Bluebook entitled **Area and Yield of Certain Principal Crops,** of those classifications of cotton descriptions which have come to be recognised in the cotton trade. Among the publications issued by the Chamber there are certain tables exhibiting the receipts of produce from sundry railway stations in India. For the convenience of the cotton trade those stations are, in the said tables, grouped with regard to the descriptions or qualities of cotton derived from them. These classifications or groupings are ostensibly made on a territorial basis, inasmuch as the various descriptions of cotton bear territorial designations, such as "Berar," "Khandeish," "Dhollera," etc. But, since it often happens that the production of a grade of cotton known to the trade by one of these territorial designations is not restricted to the true limits of the district from which it takes its name, various stations without these limits are, for trade purposes and in the Chamber's returns, included in groups or categories to which the said stations do not strictly belong.

In recent years it has been found that the conditions under which the older classification of the Chamber was adopted, have undergone some alteration, and that either (*a*) the cotton received from certain stations is no longer of the class that formerly came from them, or (*b*) the trade standards differentiating between the various classes have so varied as to exclude the produce of a particular station from the category in which it formerly stood. It had therefore been found that the older classification of the Chamber was no longer in accordance with the requirements of the trade; and at the instance of the Bombay Cotton Trade Association, Ltd., the Committee of the Chamber of Commerce in 1903 revised and altered the groupings of stations as shown in their published returns of arrivals.

It appeared from the papers forwarded by the Chamber of Commerce that the said body had, in November 1903, addressed the Director-General of Statistics in the above terms, and informed him of the changes that had been made. In

doing so they stated that they were aware that in certain Government returns (*e.g.*, "**Area and Yield of Certain Crops,**" etc.) the yield of cotton was shown under territorial designations which, while certain of them were identical with those used in the trade, were understood to relate strictly to the territorial districts or divisions. They pointed out that there was thus an essential difference between the classification observed by Government and that observed by the trade; and while the Committee thought it improbable that the two systems could be brought into line, they considered it right that Government should have information as to the classification used by the trade.

Together with the said letter of the Chamber were printed extracts from the replies of various officials to whom the Director-General of Statistics had referred the question for opinion, including one from the Director of Land Records and Agriculture, Bombay Presidency, who stated that he had, so far as possible, adopted the revised classification and entered separate estimates for the different varieties suggested by the Chamber.

The Committee recorded the papers with satisfaction. (*Appendix* **B.**)

DISCREPANCY IN COTTON STATISTICS.

(*See Reports* 1902, *p.* 38 ; 1903, *p.* 8.)

Two years ago the Secretary of the Association drew attention to the marked discrepancy apparent between the Government estimates of the cotton crop on the one hand and the total of exports and mill consumption on the other hand, without taking into consideration the quantity of cotton used in hand-spinning, etc. The Government of India thereupon revised its estimates and its method of computation with the effect of reducing considerably the discrepancy referred to; and in the past year the examination of this question has been further prosecuted by the Director-General of Statistics and the two divergent sets of figures have been further assimilated.

A table was introduced in the Report of the Association for 1903 which showed the estimated yield of cotton for each of the last ten years and, side by side with it, the quantities exported and consumed in mills. The net result of that table was to suggest that the total of exports and consumption in the ten years had exceeded Government's estimate of Crop by some 21 per cent. In that table it was thought well to give the yield in bales of 400 lbs., the exports in cwts., and the mill-consumption in bales of 392 lbs., in order to facilitate reference to the various sources from which the respective figures were taken, and in which those denominations are used. In the recent issue of the Bluebook *AREA AND YIELD OF CERTAIN PRINCIPAL CROPS*—a Table similar in purport to that published by the Association has been introduced ; but the various quantities have been reduced to the common expression of bales of 400 lbs.; and since it is evident that the Association's figures will not now be controverted, it is thought well to adopt a similar uniformity in the Table printed below. The figures in this Table, so far as they relate to crops, are taken from the new issue of the Bluebook referred to, which give evidence of the great care with which the estimates for past years have been revised by Government. It will be

seen that the effect of this revision has been to reduce the discrepancy to some 12·8 per cent. The following is the text of a footnote appended by the Director-General of Statistics to the Table in question :—

" The exports are for the year ending 30th September and the mill consumption for the year ending 30th June. No reliable information exists as to the annual consumption outside the mills, but a million cwt. or 2,80,000 bales is probably below the mark. The deficiency in the total of the estimates compared with the quantities exported and consumed, which is especially noticeable in the year 1899-1900, cannot be satisfactorily allocated ; but it is probable that the remaining errors are chiefly in the estimates of Natives States."

COTTON.

Yield, Exports and Mill Consumption.

ALL INDIA.

Years.	Yield (official year), Bales of 400 lbs.	Export (official year), Cwts.	Mill Consumption (year ending 30th June), Bales of 400lbs.
	(Revised.)		
	21,92,647	33,84,697	13,14,879
1894-95	26,45,041	52,48,428	13,81,131
1895-96	22,44,870	52,16,028	12,74,917
1896-97	24,50,333	37,22,526	14,51,701
1897-98	28,95,682	54,11,012	16,41,686
1898-99	10,73,612	43,73,470	14,24,284
1899-1900	29,38,188	35,75,703	13,24,705
1900-01	27,32,253	57,00,014	17,29,737
1901-02	33,54,874	60,44,806	17,04,558
1902-03	32,81,185	79,31,075	17,09,870
1903-04			
Total ...	2,58,08,685	5,06,07,754 or 1,41,70,171 Bales of 400 lbs.	1,49,57,468 1,41,70,171
Total Export and Mill Consumption			2,91,27,639
Deduct—Yield			2,58,08,685
10 years' Excess of Alleged Consumption over Production ...			33,18,954 or 12·86 of yield.

The introductory Note to the Volume contains the following reference to the matter :—

" The attention recently paid to the estimates of the cotton crop, which will doubtless lead to greater accuracy in future, has shown that some of the estimates relating to past years were extremely defective. The revision of the estimates which was attempted has been only partially successful, as the known deficiency in the total production cannot always be distributed owing to the large unregistered movements of cotton across provincial boundaries by road, and the want of reliable information for some of the Native States. The productions since 1891-92 of the principal cotton-growing provinces is, however, now stated with some approach to accuracy."

It is only right to remind members that the difficulty encountered by Government in an attempt to estimate crops and the yield per acre is by no means peculiar to this country, and that although there is perhaps no country in which agricultural statistics are carried further than in the United States of America,

the publications of the American Government contain repeated warnings that even the best estimates they can arrive at in this respect must be taken with a certain reserve.

PROGRESS OF THE MILL INDUSTRY.

(*See Reports* 1902, *p.* 37 ; 1903, *p.* 9.)

In the Reports for the past two years an effort has been made to show, not only the extent to which Government's statistics of Crops are at issue with the sum of exports and mill consumption, but also, and more particularly for the benefit of Members, the following factors :—

(*a*) The discrepancies disclosed by a comparison of the ascertained quantity of arrivals of cotton in Bombay with the sum of the ascertained exports and the alleged mill consumption.

(*b*) The discrepancies between the ascertained quantity of yarn production in the mills and the quantity of cotton returned by Millowners as having been used in the production of that yarn: For obvious reasons this can be done only in respect of Bombay Island.

The following table gives the figures on which both these analyses must be founded :—

COTTON.

Bombay Island.

Number of Hands Employed, Yarn Produced, Mill Consumption, Exports and Arrivals.

Year ending 30th June.	Hands employed.	Yarn produced. Cwt.	Cotton.		
			Mill Consumption. Cwt.	Exports. Cwt.	Arrivals. Cwt.
1897	69,530	21,75,000	24,59,646	35,28,437	56,45,113
1898	70,728	23,08,036	28,60,648	29,17,068	60,55,890
1899	77,169	26,59,821	33,27,800	38,43,423	71,16,133
1900	*72,914*	*21,42,112*	*26,06,800*	*19,66,951*	*34,59,925*
1901	82,162	16,95,490	24,35,153	33,60,875	66,38,588
1902	86,122	29,88,619	34,55,823	44,01,071	74,98,708
1903	86,913	29,37,314	34,51,798	44,46,865	85,89,010
1904	89,915	28,17,206	34,04,569	51,07,588	75,30,087
Total	5,62,539	1,75,81,486	2,13,95,437	2,76,05,327	4,90,73,529
7 years' average	80,363	25,11,641	30,56,491	39,43,618	70,10,504

Members who have taken an interest in the annual examination of this important matter will remember that the figures giving the yarn production in Bombay Island for the year ending 30th June 1900 are not obtainable. For this reason the corresponding figures for that year, which are printed in italics, are ignored in the calculations relating to yarn and the average struck on the remaining period. This period is now one of seven years, so that the absence of

the yarn figures for one year is of diminishing importance. At the same time it may be well to give the following sentences from the Report for 1902 in which the matter was first discussed :—

"From the foregoing Table it might appear that the sum of mill consumption and exports fell short of total arrivals by some 73,000 cwts. per annum. This, however, is purely fortuitous, and arises from the elimination of the figures for 1900. In that year the combined exports and mill consumption exceeded the arrivals by 11,13,803 cwts., so that over the complete six years' period the combined exports and mill consumption really show an average annual excess of 1,49,863 cwts. over arrivals.....Most unfortunately the loss of the figures representing the yarn production for 1900 bars any profitable analysis of a more searching kind."

Taking first the **discrepancy between the ascertained quantity of arrivals in Bombay and the sum of ascertained exports and alleged mill consumption,** it may be said that since yarn production does not enter into this calculation, there is no reason why we should not take the whole period of eight years including 1900. And on the whole it is satisfactory to find that a calculation so taken confirms the result of one made upon the six years' figures in the last Report, and that the discrepancy consists of an excess of a little less than two per cent. over the ascertained arrivals. This of course would not hold good of individual years ; and it will be seen that the sum of consumption and exports for the year 1904 exceeds the total arrivals in Bombay in the same year by no less than 9,82,070 cwts. equal to 11·7 of the ascertained arrivals. As the exports are also definitely ascertained, it might be supposed that this discrepancy of 9,82,000 cwts. necessarily arises in the returns of mill consumption, and indicates an exaggeration of close on 29 per cent. of that consumption. But there are always considerable stocks of cotton carried over from year to year in a market like Bombay ; and for that reason the mill consumption and exports in a particular year may commonly exceed or fall short of the arrival. It is for this reason that it is necessary, in testing these matters, to strike an average over a considerable series of years.

We then turn to the **comparison of the ascertained production of yarn with the alleged consumption of cotton.** In this calculation we must of course leave out all the figures relating to 1900, and strike an average on the remaining period of seven years. No doubt there is a certain element of possible error in this procedure for the reasons stated at the end of the foregoing paragraph, but it cannot be helped. It is interesting to find that the discrepancy actually demonstrated is one of 17·8 per cent. on the cotton said to have been used ; and this to some extent approximates to the 16 per cent. that is commonly supposed to represent the wastage of cotton in process of manufacture in India. But unfortunately it is not possible to regard this issue as otherwise than fortuitous, when we notice that in one of the years which enter into the calculation the wastage is shown as 30·3 per cent., while in another it is represented as having fallen so low as 11·5 per cent. At the same time, it is obvious that since Millowners began, in the last three years, to recognise the importance of constituting correct data for the statistical examination of their industry, there has been a closer approximation to accuracy. Indeed if an average be taken for the last three years

by themselves, it will be found that the difference is one of 15·2 per cent., and it is perfectly possible that this may be found to be the true average rate of wastage in Bombay.

It is obviously impossible to make for all India an examination on the lines followed in the foregoing analysis of the Industry as it exists in Bombay Island, for the reason that in up-country districts it is impossible to keep count of the incomings and outgoings of cotton in the ordinary course of trade, while in Bombay we have definitely ascertained figures regarding the arrivals and exports of the article. The following Table however is interesting :—

COMPARISON OF COTTON CONSUMPTION AND YARN PRODUCTION, NINE YEARS—1895-96 to 1903-04.

ALL INDIA.

12 months' period ending 30th June.	Cotton Consumption. Cwts.	Yarn Production. Cwts.
1896	49,32,613	38,60,287
1897	45,53,276	37,78,436
1898	51,84,648	41,30,320
1899	58,63,165	45,74,867
1900	50,86,732	45,87,708
1901	47,31,090	31,51,563
1902	61,77,633	51,15,519
1903	60,87,690	51,44,951
1904	61,06,681	51,57,338
Total of nine years...Cwts.	4,87,23,528	Total of nine years Cwts. 3,95,00,989
Annual Average ... „	54,13,725	Annual Average... „ 43,88,999
Deduct—16 °/₀ wastage „	8,66,196	Difference ..... „ 1,58,530
Cwts.	45,47,529	Cwts. 45,47,529

Restoring to this difference of 158,530 cwt., the 16 per cent. of cotton already deducted on account of wastage, we find some 188,726 cwts. or 53,922 bales unaccounted for, this being nearly 3½ per cent. of the estimated cotton consumption.

The following Tables show the general position of the Industry (*a*) in All India, (*b*) in Bombay Island :—

Number of Mills, number of Spindles and Looms, Average number of Hands Employed, and Mill Consumption.

ALL INDIA.

Years ending 30th June.	Number of Mills.	Number of Spindles.	Number of Looms.	Average No. of Hands employed daily.	Approximate Quantity of Cotton consumed. Cwts.	Bales of 392 lbs.
1895...	148	38,09,929	35,338	1,38,669	46,95,999	13,41,714
1896...	155	39,32,946	37,270	1,45,432	49,32,613	14,09,318
1897...	173	40,65,618	37,584	1,44,335	45,53,276	13,00,936
1898...	185	42,59,720	38,013	1,48,964	51,84,648	14,81,328
1899...	188	47,28,333	39,069	1,62,108	58,63,165	16,75,190
1900...	193	49,45,783	40,124	1,61,189	50,86,732	14,53,352
1901...	193	50,06,936	41,180	1,72,883	47,31,090	13,51,740
1902...	192	50,06,965	42,584	1,81,031	61,77,633	17,65,038
1903...	192	50,43,297	42,092	1,81,599	60,87,690	17,39,340
1904...	191	51,18,121	45,337	1,84,779	61,06,681	17,44,766

BOMBAY ISLAND.

Years ending 30th June.	Number of Mills.	Number of Spindles.	Number of Looms.	Average No. of Hands employed daily.	Approximate Quantity of Cotton consumed.	
					Cwts.	Bales of 392 lbs.
1895...	69	21,23,892	20,217	75,740	28,53,879	8,15,394
1896...	71	21,86,323	21,335	78,455	29,73,873	8,49,678
1897...	75	21,87,425	21,287	69,530	24,52,646	7,02,756
1898...	82	22,26,982	21,379	70,728	28,60,648	8,17,328
1899	82	24,10,861	22,209	77,169	33,27,800	9,50,800
1900...	82	25,36,891	22,215	72,914	26,06,800	7,44,800
1901...	81	25,71,092	22,414	82,162	24,35,153	6,95,758
1902...	80	25,23,769	22,845	86,122	34,55,823	9,87,378
1903...	80	25,33,382	23,125	86,913	34,51,798	9,86,228
1904...	79	25,34,230	24,136	89,915	34,04,569	9,72,734

To ascertain how Bombay compares with the rest of India in the matter of progress, it is necessary in several cases to subtract the Bombay figures from those for the whole of India and compare the former with the balance.

One mill in Bombay was destroyed by fire in 1903, but was retained on the list for that year in the expectation that it might be re-erected. But the number of spindles destroyed in it were written off. This mill is now removed from the list, as it is understood that it may not be re-erected; and at the same time some 28,720 spindles belonging to a mill subsequently burned (but which is being re-constructed) are struck off. It should, therefore, be borne in mind that the reduction of one in the number of mills this year does not in itself affect the total of spindles, while the apparent addition of only 848 spindles to Bombay's equipment is a net increase after making an off-set in respect of the 28,720 spindles destroyed as stated.

Through the removal of the first burnt mill from the list, Bombay's share in the **total number of mills** in India has slightly declined to 41·36 per cent. of that total, while her share in the total **number of spindles** has, through the temporary destruction of the other mill, been for the moment reduced to 49·5 per cent. of the total. Her nett **addition of spindles** is only 848, but in reality there has been an addition of about 29,000, while the rest of India has added 73,976 spindles or 2·9 per cent. of its total.

In **looms** it really looks as if Bombay had taken note of the warning that clearly issued from the statistical examination of her weaving power in the last two reports of this Association. The returns made by the mills as at 30th June 1904 show her to have added 1,011 looms or 4·3 per cent. to her complement; but a strong impression exists that in certain cases a considerable number of looms not shown on the returns had been erected before the date named. As the subscriptions of members are affected by these additions, it is hoped that millowners will spontaneously give information regarding these additions to plant.

On the other hand, the rest of India has added only 1·1 per cent. or a total of 234 to its looms, and in this important department Bombay now represents 53·23 of India's total. It is satisfactory of course to notice in the appended table that in the past year the **Exports of Country-made Piece-goods to China** were nearly seventeen times as great as in 1903, but even the 27,98,625

yards shipped in 1904 compare very poorly with the 1,57,51,688 shipped in 1888 or the 1,00,64,441 shipped in 1895 and actually fall short by some 8,37,000 yards average of the previous ten years.

Exports of Country-made Piece-goods from Bombay to China and Japan.

Period.	China.		Japan.		Total.	
	Packages.	Yards.	Packages.	Yards.	Packages.	Yards.
From 1st Jan. to 31st Dec. 1877...	10	14,400	...	.....	10	14,400
Do. do. 1878...	1,206	14,99,334	58	1,13,528	1,264	16,12,862
Do. do. 1879...	296	3,65,640	5	8,400	301	3,74,040
Do. do. 1880...	1,553	18,90,685	110	1,32,000	1,663	20,22,685
Do. do. 1881...	144	1,68,139	2	5,250	146	1,73,389
Do. do. 1882...	573	7,13,237	20	36,714	593	7,49,951
Do. do. 1883...	1,875	21,88,770	452	5,65,953	2,237	27,54,723
Do. do. 1884...	1,595	17,70,662	16	25,187	1,611	17,95,849
Do. do. 1885...	2,303	37,12,273	6	5,376	2,309	37,17,649
Do. do. 1886...	2,302	29,88,890	...	.....	2,302	23,88,890
Do. do. 1887...	1,963	25,84,680	3	4,560	1,966	25,89,240
Do. do. 1888...	11,320	1,57,51,688	96	1,40,321	11,416	1,58,92,009
Do. do. 1889...	1,302	19,85,997	26	31,200	1,328	20,17,197
Do. do. 1890...	3,148	36,60,574	21	23,800	3,169	36,84,374
Do. do. 1891...	4,564	61,02,250	...	.....	4,564	61,02,250
Do. do. 1892 ..	7,416	99,84,335	...	.....	7,416	99,84,335
Do. do. 1893...	3,598	45,17,445	38	57,312	3,636	45,74,757
Do. do. 1894...	4,949	60,68,702	...	.....	4,949	60,68,702
Do. do. 1895...	7,744	1,00,64,441	7	7,200	7,751	1,00,71,641
Do. do. 1896...	7,024	86,38,535	26	30,420	7,050	86,68,955
Do. do. 1897...	2,368	30,36,875	15	21,988	2,383	30,58,863
Do. do. 1898...	947	13,18,478	...	.....	947	13,18,478
Do. do. 1899...	3,034	39,93,348	1	1,680	3,035	39,95,028
Do. do. 1900...	1,080	13,72,980	...	.....	1,080	13,72,980
Do. do. 1901...	418	5,59,100	...	.....	418	5,59,100
Do. do. 1902...	500	5,69,758	...	.....	500	5,69,758
Do. do. 1903...	138	1,68,081	...	.....	138	1,68,081
Do. do. 1904...	2,410	27,98,025	...	.....	2,410	27,98,025

Increase on figure for 1903, 1564·68 per cent. or nearly 17 times as much as in the previous year.

It is evident from the concomitant increase of 47·27 per cent. in the **shipment of Piece-goods from the United Kingdom to China** in the past year that the latter country, though it prefers the cheap Indian goods, cannot get enough of them ; and there can be little doubt that with this steady foreign demand and the ready off-take in the Indian markets, millowners may invest in looms with considerable confidence. In fact the one thing they cannot do with confidence at the present juncture is to abstain from investing in looms. Reference must here be made to the following Tables :—

Exports of Country-made Yarn from Bombay to China and Japan.

Period.	To China (Bales, 400 lbs. each).	To Japan (Bales, 400 lbs. each).	Total Bales.
From 1st January to 31st December 1877	28,516	142	28,658
Do. do. 1878	45,933	1,745	47,678
Do. do. 1879	45,530	4,842	50,372
Do. do. 1880	63,194	4,527	67,721
Do. do. 1881	61,783	7,378	69,161
Do. do. 1882	81,434	9,854	91,288
Do. do. 1883	94,982	17,421	1,12,403
Do. do. 1884	1,27,318	13,846	1,41,164
Do. do. 1885	1,54,517	19,020	1,73,537
Do. do. 1886	1,99,407	20,543	2,19,950
Do. do. 1887	2,05,158	39,730	2,44,888
Do. do. 1888	2,34,071	52,697	2,86,768
Do. do. 1889	2,54,697	62,220	3,16,917

Period.	To China (Bales, 400 lbs. each)	To Japan (Bales, 400 lbs. each).	Total Bales.
From 1st January to 31st December 1890	3,25,060	37,722	3,62,782
Do. do. 1891	3,65,038	10,939	3,75,977
Do. do. 1892	3,85,771	21,445	4,07,216
Do. do. 1893	2,97,572	14,198	3,11,770
Do. do. 1894	3,38,703	10,743	3,49,446
Do. do. 1895	3,74,119	2,515	3,76,634
Do. do. 1896	4,71,023	2,467	4,73,490
Do. do. 1897	3,61,221	645	3,61,866
Do. do. 1898	4,37,645	475	4,38,120
Do. do. 1899	5,79,619	250	5,79,869
Do. do. 1900	2,53,331	100	2,53,431
Do. do. 1901	5,36,195	.....	5,36,195
Do. do. 1902	5,55,487	.....	5,55,487
Do. do. 1903	6,04,044	.....	6,04,044
Do. do. 1904	4,60,316	3	4,60,319

Decrease on last year's figures 23·79 per cent.

Shipments of Cotton Piece-Goods and Yarns from the United Kingdom to China and Japan from the year 1877 *to* 1904.

Years.	Piece-Goods of all kinds.			Yarns.		
	To China (including Hongkong).	To Japan.	Total.	To China (including Hongkong).	To Japan.	Total.
(1st Jan. to 31st Dec.)	Yards.	Yards.	Yards.	Lbs.	Lbs.	Lbs.
1877...	36,73,29,900	2,71,[illegible],300	39,44,80,200	1,79,62,200	1,51,05,700	3,30,67,900
1878...	34,00,97,800	4,22,32,400	38,23 30,200	1,10,68,200	2,54,09,600	3,64,67,800
1879...	46,23,03,800	6,16,17,500	52,39,21,300	1,43,43,400	2,46,07,700	3,89,51,100
1880...	44,72,71,900	6,14,64 500	50,87,36,400	1,95,14,200	2 69,11,600	4,64,25,800
1881...	52,38,52,300	6,33,25,100	58,71,77,400	1,91,49,400	2,83,29,800	4,74,79,300
1882...	40,19,58,300	5,29,90,500	45,49,48,800	1,52,26,700	1,91,44,200	3,43,70,900
1883...	37,06,59,800	4,60,06,000	41,56,65,800	1,33,70,700	2,01,48,500	3,35,19,200
1884...	39,45,83,600	4,53,54,200	43,99,37,800	1,57,24,300	2,31,34,800	3,88,56,100
1885...	52,39,27,000	4,54,12,400	56,93,39,400	2,03,73,900	1,26,87,200	3,30,61,100
1886...	46,58,23,000	3,46,28,500	49,04,51,500	1 05,98,200	1,63,32,200	2,69,30,400
1887...	55,27,42,700	6,54,03,800	61,81,46,500	1,18,82,200	2,34,72,500	3,53,54,700
1888...	57,45,47,500	7,78,56,400	65,24,03,900	1,74,74,000	2,71,68,600	4,46,42,600
1889...	47,44,26,100	8,25,78,000	55,70,04,100	88,28,900	2,68,32,600	3,56,61,500
1890...	57,02,97,800	6,33,09,400	63,36,07,200	1,49,56,900	2,31,00,500	3,80,57,400
1891...	53,41,29,400	6,11,20,100	59,52,49,500	1,91,44,800	1,48,26,500	2,79,71,300
1892...	49,74,85,200	7,51,80,500	57,26,65,700	85,01,300	2,33,84,900	3,18,86,200
1893...	36,54,25,500	6,83,07,800	43,37,33,300	87,78,500	1,89,63,000	2,77,41,500
1894...	42,53,40,200	7,16,03,900	49,69,44,100	97,69,500	1,46,38,800	2,44,08,300
1895...	52,81,87,300	9,90,35,600	62,72,22,900	1,12,26,100	2,12,66,000	3,24,92,100
1896...	54,29,93 400	10,55,07,100	64,85,00,500	90,76,400	2,27,87,400	3,18,63,800
1897...	44,51,82,100	9,40,56,700	53,92,38,800	1,12,46,000	2,31,42,600	3,43,88,600
1898...	48,64,96,200	10,49,66,000	59,14,62,200	1,31,09,700	1,71,91,500	3,03,01,200
1899...	55,40,80,000	9,38,50,600	64,79,30,600	1,15,44,700	1,25,26,500	2,38,71,200
1900...	45,61,95,300	11,94,70,200	57,56,65,500	22.69,700	1,12,78,800	1,35,48,500
1901...	43,10,72,700	6,33,21,400	55,43,94,100	69,38.200	74,85,900	1,44,24,100
1902...	57,47,73,000	10,91,16,400	68,38,89,400	63,97,800	23,65,900	87,63,700
1903...	47,76.91,500	6,73,24,800	54,50,16,300	46,60,300	14,06,100	60,66,400
1904...	54,90,73,900	4,23,74,000	59,14,47,900	24,57,200	6,80,700	31,37,900
Average for 10 years ...	51,05,74,510	6,99,02,280	60,04,76,820	78,72,610	1,20,13,140	1,98,85,750
Increase or decrease on figures for 1903.	+ 14·94 %	— 37·06 %	+ 8·51 %	— 47·27 %	— 51·58 %	— 48·27 %

It will be seen from one of these tables that from Bombay China has taken in the past year 4,60,316 bales of **yarn** as against 6,04,044 in 1903, the decline being one of 23·79 per cent. From another of the tables it will be seen that she has taken from the United Kingdom only 24,57,200 lbs. in 1904 as against 46,60,300 in 1903, the decline in this case amounting to as much as 47·27 per cent. The average exports of yarn from Bombay to China in the previous ten years had been 4,51,138 bales per annum, so last year's figures are almost in exact accord with the average. But when it is noticed that the shipments from Britain to China have fallen so vastly short of the average, it is fairly clear that local weaving in China has been practised to a less degree, and that the China market for Piece-goods ought now to be in a state to take readily what cloth is offered at suitable rates. Unless it can be shown therefore that the decline in China's imports of yarn is due purely to an increase in her spinning, the best results are to be looked for in the enterprise which Bombay is now showing in the erection of looms.

It seems desirable to carry a step further this examination of the Chinese imports of Indian and British textiles. To do this effectively we must establish in each class the average for the ten years 1894 to 1903, and collate them with the figures for 1904. For each of these periods we must reduce the yarn figures to the common expression of pounds, and must try to establish in yards of cloth the equivalent of the poundage so found. Adding this estimate of cloth locally manufactured to the known quantity of cloth imported from the United Kingdom and India, we must then ascertain what is China's average demand for cotton cloth of the classes supplied by these two countries, and must thereafter attempt to discover whether that demand has developed, and whether Britain or India respectively serve the demand with manufactured cloths or with yarns for the local production of the cloth. This is attempted in the following table and notes:—

Imports into China.

From	Yarn.		Cloth.	
	Average of previous 10 years.	1904.	Average of previous 10 years.	1904.
			yds.	yds.
India, bales of 400 lbs.	4,51,138	4,60,316	.....	.....
„ lbs.	18,04,55,200	18,41,26,400	35,79,030	27,98,025
U. K. lbs.	78,72,610	24,57,200	51,05,74,000	54,90,73,900
Total lbs. ...	18,83,27,810	18,65,83,600	.....	.....
Total yards...	75,33,11,240	74,63,34,400	51,41,53,030	55,18,71,925

In this table it is taken for purposes of calculation that one pound of yarn makes four yards of the cloth chiefly used in China. This is of course only a rough computation, and contains such an element of error that it will be useless to go too much into detail.

The following notes give the result of the examination :—

The Average Annual Demand for cloth in China in the 10 year period was	yards	1,26,74,64,270
Of this it imported ready made cloth 46 per cent... ... and the balance in yarn.	„	51,41,53,030
At that time India supplied the equivalent of ... ... or about 57 per cent. of the whole, only about 0·3 per cent. being cloth.	„	72,33,99,800
The U. K. on the other hand supplied 43 per cent. of the whole or the equivalent of ... ... about 2½ only being yarn.	„	54,20,64,000

It will be thus seen that in the past year India had improved upon its average exports of yarn to China by the equivalent of some 1,46,84,800 yards of cloth but that her export of cloth to China, when compared with the average of the previous ten years, shows a falling off of 7,81,005 yards.

Her total transactions in this direction amount to	yards	73,93,03,600
Making 57 per cent. of China's total demand, *viz.*	„	1,29,82,06,300

Bombay has still been unable to touch Japan either with yarns or with piece-goods ; but it appears that from the United Kingdom, Japan continues to take small and, indeed, diminishing quantities in both lines.

The following table is added for the first time, as it shows for each of the last nine years the number of **pounds of yarn produced per spindle in position** ; and therefore affords a fairly good index of the steadiness with which the spindles have been worked, and the prosperity or depression of the industry :—

Years.	Spindles in position.	Yarn produced.	Cwt. per spindle.
		Cwts.	
1896	39,32,946	38,60,287	0·981
1897	40,65,618	37,78,436	0·929
1898	42,59,720	41,30,320	0·969
1899	47,28,333	45,74,867	0·967
1900	49,45,783	45,87,708	0·928
1901	50,06,936	31,51,563	0·627
1902	50,06,965	51,15,519	1·021
1903	50,43,297	51,44,951	1·020
1904	51,18,121	51,57,338	1·008

NEW MARKETS FOR INDIAN GOODS.

Shipments of Yarn to the Levant.

(*See Report* 1903, *p.* 49.)

The success thus far attained in the effort of the Association to secure an adequate share of the large yarn trade in the Levant, cannot be better recorded than by reprinting the following leading article from the *Times of India* of the 8th December last :—

"Recent Consular reports from the Levant give interesting particulars of the remarkable growth of the trade in Indian yarns in those regions. The Consul-General at Smyrna says :—" British India also commenced competing in yarns in 1901, and has since followed them up with cotton piece-goods." In another place he says :—" The importation to Smyrna of Indian cotton yarns is a new feature. It only commenced in 1901 and is proceeding apace to the detriment of Italian yarns." Mr. Consul Waugh, in his Constantinople report, quotes the following passage from a letter addressed to the French Chamber of Commerce in that city by their Smyrna correspondent :—" Cotton yarns, unbleached, which were an English monopoly twenty years ago, were secured by the Italians, who held the market for the coarser numbers, 4 to 8, until 1900. Since then the Indian spinners are beating them off the market. The Indian houses are now seriously studying the manufacture of fine numbers (12 to 24 and beyond)." The Consul at Suez says :—" The importation of cotton twist from India has, during the year 1903, again nearly doubled the amount imported the previous year. The importation for the year 1903 was 201,475 kilos., valued at E£10,415." Again we find in the last report from Damascus the following notice of a similar state of matters :—" I should not," he says, " omit to state here that (in yarns) Italy has lost ground considerably within the last two years, her place being taken and more than filled by British India, the value of whose cotton yarn trade represents 25 per cent. of the whole import." In another part of the same report it is stated that " though India does not of course rank next to the United Kingdom in imports, it is doing so remarkably well—with a total value of £53,012—that it does, as a matter of fact, take fourth place (I omit " other parts of Turkey" from my calculation), Austria-Hungary and Germany only being credited with a larger share of the imports."

" It is interesting to note how unanimously these officers date the inception of this trade from the exact time when the Secretary of the Bombay Millowners' Association inaugurated a systematic effort to capture these markets. It is probable that few of those who attended the first exhibitions organised by him and examined the samples and the information he had collected realised what could be done in this way. But the extent of the success attained may best be judged by the latest figures. In April last we quoted from the newly issued Annual Report of the Millowners' Association the figures for the development of the trade up to that time. It was there shown that in 1901-02 the entire shipments of Bombay yarn to the Levant amounted to only 444,145lbs., while in the nine months ending 31st December 1903 they had grown to 1,960,410lbs. From this it was argued that in two years' time the Bombay yarn trade with the Levant had been multiplied by six. We have just seen the figures for the ten months, January to October, of this year; and they show that this estimate fell very far short of the reality. The total for the ten months is no less than 4,475,947lbs., so that the average monthly shipments of yarn to the Levant now exceed considerably the entire year's shipments of 1901-02. The result is certainly a triumph for that systematic collection and examination of commercial intelligence which British merchants are perhaps a little disposed to condemn."

THE MARKETS.

The spinning and weaving industry, not in India alone, has in the past year been subject to very marked vicissitudes, arising mainly from the abnormal and artificial conditions in the American cotton market. The hesitating and

always precarious but still continued rise of the price of cotton from 4*d.* to upwards of 9*d.* created a situation without precedent and upset all reasonable calculations. Indeed, as the rates for yarn for long failed to respond to the rise of the price of the material, and at no time touched a parity with the highest rates of cotton, all margin of profit disappeared, except for those few mills that had secured their requirements well ahead. There was consequently in the early part of the year an extensive resort to short time, a proportionate curtailment of production, and a consequent bareness in the eastern markets which has yielded the most happy results as soon as the prices of the material and of the finished article resumed their proper relations. Before this happened, however, several companies went under and have changed hands with wholesale loss of capital.

COTTON PRICES.

Average spot pieces of Middling Upland per lb. in Liverpool and Ginned Oomrawati and Ginned Bengal per candy in Bombay.

	Price per lb. in Liverpool for Middling Upland.	Price per Candy of 784 lbs. in Bombay.			
		Oomrawati Ginned "Fine."	Delivery.	Bengal Ginned "Fine."	Delivery.
1904.	*d.*	Rs.		Rs.	
March	8·27	364½	25th March ...	251½	25th March.
April	8·02	259½	25th April ...	256½	25th April.
May	7·43	254	25th May ...	253½	25th May.
June	6·46	251	25th June ...	251	25th June.
July	6·27	249½	Ready ...	248½	Ready.
August	6·20	261	Do. ...	249	Do.
September	6·57	267½	Do. ...	252½	Do.
October	5·49	251½	Do. ...	229½	In December.
November	5·30	219½	In December ...	203	Do.
December	4·20	190	Do. ...	181	Do.
1905.					
January	3·79	170	In January ...	168	In January.
February	*4·03	*172½	In February ...	*167	In February.

N.B.—For approximate Ready Rates (Indian descriptions) add Rs. 2 to Forward Quotations.

The prices of "Ginned Bengals" ruled high from April to July owing to insufficient stock in the market.

Later on the price of cotton declined under various influences, including the prospect of a large American crop and the ultimate success of the monsoon which had for some time been in danger. The smallness of the stocks in the further East, the virtual absence of Japanese competition, and the remarkable stability of the China exchanges, as evidenced by the Appended Table, produced such a smart recovery in the spinning industry as was without precedent and almost without previous indications.

* Up to 11th February.

SILVER AND THE CHINA EXCHANGE IN 1904.

Rates of last day in each month up to 31*st January* 1905.

	Price of Bar Silver in Bombay.	China Exchange.	
		Hongkong per 100 Dollars.	Shanghai per 100 Taels.
1904.	Rs. a. p.	Rs. a. p.	Rs. a. p.
26th February	67 4 0	134 4 0	189 0 0
31st March	65 6 0	129 8 0	181 0 0
29th April	66 8 0	130 0 0	180 0 0
27th May	64 14 0	132 0 0	182 8 0
24th June	65 14 0	134 8 0	186 8 0
29th July	69 4 0	136 0 0	189 8 0
26th August	67 6 0	132 8 0	184 8 0
30th September	67 12 0	136 0 0	190 0 0
28th October	68 0 0	136 0 0	190 0 0
25th November	69 10 0	135 0 0	192 0 0
30th December	73 0 0	137 0 0	194 0 0
1905.			
27th January	73 2 0	138 8 0	198 0 0

SILVER AND THE CHINA EXCHANGES SINCE 1894.

Rates of 31*st March in each year.*

	Price of Silver. Per 100 Tolas.	Exchange on Hongkong.
	Rs. a.	Rs.
1894	84 $11\frac{7}{32}$	$175\frac{1}{32}$
1895	91 12	$188\frac{1}{16}$
1896	92 $9\frac{1}{12}$	$186\frac{6}{13}$
1897	83 $9\frac{1}{2}$	$163\frac{89}{100}$
1898	71 3	$141\frac{1}{4}$
1899	73 $15\frac{15}{32}$	$149\frac{3}{25}$
1900	73 $3\frac{3}{4}$	$147\frac{4}{13}$
1901	75 $4\frac{9}{32}$	$151\frac{17}{30}$
1902	67 $1\frac{3}{7}$	$138\frac{3}{28}$
1903	60 $4\frac{7}{8}$	$119\frac{1}{2}$
1904	70 $10\frac{8}{32}$	$137\frac{8}{17}$
1905	70 4†	$134\frac{1}{2}$†

At the time of compiling this report all the auguries are most favourable to the industry; and this holds good not only of spinning, but, in even greater measure, of weaving. It will probably be felt that among the many grounds for congratulation at the present time, one that deserves special mention is the effort that is being made to keep touch with the China demand for cloth, for it has looked for some years as if the inability of India to supply the further East with tissues could result only in the creation of a formidable weaving industry on that side which it would afterwards be impossible to overcome.

† Approximate.

USE OF SALT IN MANUFACTURING PROCESSES.

A communication was received from the Commissioner of Customs, Salt, Opium and Abkari, at the end of March 1904, to the effect that he had received applications from certain mills for the privilege of using duty-free salt in manufacturing processes (bleaching and dyeing) carried on by them, and the Commissioner asked for information on the following points :—

(1) The extent to which and the manner in which salt is used in these processes,

(2) The form in which the salt is found after the processes have been carried out, and

(3) The quantity of salt required for the outturn of any given quantity of dyed stuffs.

It was added that if any more or less definite relation could be established between the quantity of salt used and the outturn, as was the case in the manufacture of soap, the conditions of the grant of the concession would be greatly simplified.

The Committee, after having made enquiries in the matter, informed the Commissioner as follows :—

(1) That common salt is used to a very great extent in dyeing colours of Diamine, Immedial and Congo groups.

(2) That after the dyeing processes have been completed the salt remains in a state of solution in the bath until the bath is refilled. Large dyeing firms on the Continent use the waste products of salts and dye for manufacturing purposes by collecting the waste liquor in large fields and evaporating all water.

(3) That the maximum quantity of salt used in the starting bath of Immedial colours is as much as 60 lbs. for dyeing 150 lbs. of yarn.

In conclusion the Committee expressed the hope that the Commissioner might be able to see his way to allow duty-free salt to be used in manufacturing processes such as those referred to in his communication. It is understood that this is now permitted.

ACCIDENTS IN MILLS.

Belts and Pulleys.

The following letter and circular relating to the prevention of such accidents as occasionally attend the careless replacing of belts on pulleys were received in August 1904 from the Chief Inspector of Factories, Bombay:—

Factory Department,
Bombay, *26th August* 1904.

From

The CHIEF INSPECTOR of FACTORIES, Bombay,

To

The SECRETARY, MILLOWNERS' ASSOCIATION, Bombay.

With reference to the correspondence printed under Appendix E on pages 29 and 30 of the report of the Bombay Millowners' Association for the year 1892, I have the honour to

inform you that recent fatal accidents have again called attention to the risk of accident involved in replacing belts on fast running pulleys, and to forward for your information a copy of a circular which is being issued on the subject :—

CIRCULAR.

FACTORY DEPARTMENT,
BOMBAY, 17*th August* 1904.

In compliance with the orders of Government, the attention of Owners and Managers of Mills and Factories is drawn to the considerable number of fatal accidents, which occurred last year from the ignorance or carelessness of operatives in replacing belting on fast running pulleys, and it is requested that the following measures for minimising the danger of this work be observed as far as possible :—

(*a*) That only experienced workmen should be allowed to replace belts on fast running pulleys, and that when doing so they should wear no loose garments ;

(*b*) That special ladders provided with hooks and spurs should be kept for such work ;

(*c*) That where possible important pulleys should be provided with belt hangers.

SHORT TIME MOVEMENT.

(*See Report* 1903, *p.* 179.)

It will be remembered that at the Annual General Meeting of the Association, held on the 15th April 1904, the question of Bombay mills going on short time was once more raised, and that the proposal was lost on a division. The matter was brought up again by a letter received from one of the members in August 1904 (that is to say, only four months later) ; and, as a means of testing the view of the whole body of members as to the propriety of calling a Special General Meeting to consider it, a communication on the subject, with voting sheets attached, was circulated to members with a request that they would record their names in one or other of the columns appropriated to " Ayes " and " Noes" respectively. The votes so recorded showed that the majority of the members were adverse to the proposal ; and a circular was accordingly issued to members on the 12th September 1904, stating that the Committee did not propose to take further action. (*Appendix* **C.**)

HOLIDAYS AND SUNDAYS IN MILLS.

Section 5 B (*b*) of the Indian Factories Act 18 reads as follows :—

" Any person may be employed in a factory on a Sunday if he has had or " will have a holiday for a whole day on one of the three days immediately " preceding or succeeding the Sunday."

From this it appears to be contemplated that the maximum period for which a mill may run continuously is twelve days ; but in the month of November 1904, it was pointed out by a member that, in consequence of the wording of the Section in question and the circumstance that the Dewali Holidays in 1904 fell on Monday and Tuesday, the 7th and 8th of that month, mills were in effect precluded from working continuously for a period of eleven days, and were obliged to stop on Sunday, the 13th. The Committee recognised that the wording of the Act might possibly have been improved ; but they did not consider that such slight hardship as resulted would justify any representations to Government with a view to its amendment. (*Appendix* **D.**)

COTTON TARES AT MILLS.

INNOVATION PROPOSED BY BOMBAY COTTON MERCHANTS' ASSOCIATION.

On the 25th July 1904 a notice was issued by the Bombay Cotton Merchants' Association to the following effect :—

THE COTTON MERCHANTS' ASSOCIATION.

NOTICE.

It is hereby notified to all merchants dealing in Cotton, that the following resolutions, passed at the General Meeting of the above Association held on the 18th day of June 1904, will be put into effect from the 1st August 1904 :—

1st.—To weigh the sample before giving, and also when returned, and to allow at the rate of 10 lbs. per 100 bales free of charge, and to charge for any Cotton, taken more than the above scale.

2nd.—Tare should be settled at the time of weighing the Cotton, and receipt thereof taken at the same time.

All merchants are requested to act up to the above resolutions.

GHELABHOY LILADHUR,
Hon. Secretary,
The Cotton Merchants' Association.

BOMBAY, 25*th July*, 1904.

This was at once brought to the notice of the Committee by one of the members, and in view of the urgency of the matter it was decided to convene a Special Meeting of the Committee at which the questions involved, as also certain proposals of Government in an entirely different connexion, might be simultaneously discussed. The meeting was accordingly held on the 29th July, when the Committee adopted and circulated to Members for signature a form of undertaking by which the signatories bound themselves to deal only on the terms hitherto recognised, and only with those sellers who adhered to such terms. This undertaking was largely signed; but it was soon after alleged that various signatories had disregarded their obligation in the matter, and other members thereupon intimated that they would withdraw.

Ultimately a Conference was arranged between the Committee and the Cotton Merchants' Association, and after some further correspondence an agreement was come to.

UPPER INDIA TRADE WITH BOMBAY AND CALCUTTA RESPECTIVELY.

This question was brought up again by the Bombay Presidency Merchants' Association at Cawnpore, who furnished particulars showing the increasing disparity between the arrivals of piece-goods at that centre from Bombay and from Calcutta respectively. The Committee being aware that the ascendancy of Calcutta in this respect is attributable to its comparative nearness to Cawnpore

and to the consequent smallness of railway charges, could not do more than forward the correspondence to the Agent of the G. I. P. Railway, who eventually informed them that the matter had recently been gone into at the instance of the Bombay Native Piece-goods Merchants' Association. He forwarded to the Association at the same time a copy of the reply that had been addressed by the General Traffic Manager of the Railway to the said Association, and it was found that the decline in Bombay's trade with Cawnpore was there ascribed to the causes already recognised by the Committee.

TECHNICAL EDUCATION.

Textile Industry.

Proposed Government Scholarships.

By a letter, dated 2nd July 1904, the Director of Public Instruction to the Government of Bombay informed the Committee that it was proposed to recommend the Government of India that two scholarships should be offered to suitable candidates in the Bombay Presidency with a view to the holders proceeding to Europe to pursue a special course of study in connection with the textile industry. It was further proposed that one of the scholarship-holders should specially investigate the hand-block printing industry and its methods, with a view to the improvement and development of this minor industry in the Presidency and especially in Gujerat. Certain details regarding the value of the proposed scholarships and the terms on which they were to be held were given in the letter referred to, and the Committee were asked to express an opinion as to the course of study that should be followed by the holders of the scholarships during their absence from India.

It was felt that these proposals merited the most careful consideration that the Association could give; and after the members of the General Committee had minuted upon them, a Special Committee of five members was appointed to go into the matter more fully and to define the recommendations of the Association. This Special Committee called into consultation some of the Managers of the leading mills in Bombay; and on the 1st August a letter was addressed to the Director of Public Instruction enumerating the subjects which it was, in the opinion of the Committee, most important that the scholars should study, and discussing those various subjects *seriatim* and at some length. It is enough, for the purposes of this report, to state that the subjects were as follows:—

(*a*) Chemistry in its application to textile requirements in general, but more especially in regard to the printing of textile fabrics, with the object of improving the hand methods at present in vogue in the villages and towns of the Bombay Presidency.

(*b*) Weaving.

(*c*) Finishing and Bleaching.

(*d*) Carding and Spinning.

For the specific recommendations made in respect of each of these subjects, members are referred to the text of the letter which will be printed among the Appendices (*Appendix* **E.**)

VENTILATION OF FACTORIES.

(*See Reports of the Association*, 1892, *p.* 16 ; 1893, *p.* 66 ; 1895, *p.* 133 ; 1896, *p.* 112 ; 1897, *p.* 9 ; 1902, *p.* 1 ; 1903, *p.* 19.)

The last communication addressed by the Association to the Collector of Bombay, Factory Department, was dated 21st July 1903, and will be found in the Association's Report for that year. No reply to this letter was received until the 4th of May 1904, when the Collector stated that the Government of Bombay had arranged that the Chemical Analyst to Government should, with the co-operation of the Factory Department, conduct an enquiry into the state of the air in Bombay Mills and Factories with a view to the acquisition of data and legislation on the subject ; and that Government would be glad to have the further views of the Association when the final proposals had been published.

No further official communication has been received from the Collector up to the time of compiling this Report ; but in the "Provincial Report upon the working of the Indian Factories Act in the Bombay Presidency for the year 1903," the following reference is made to the subject :—

"VENTILATION."

"The reports of Joint Medical and other Inspectors show that there is strong necessity for improvement in this direction. Considerable attention was given to the subject during the year under report, and the Collector of Bombay, after some correspondence, met a deputation of the Millowners' Association on the question. The discussion and conference were of value in showing that the Association was at one with the Factory Department, not only apparently on the necessity for the improvement of the ventilation of Bombay and other mills, and certainly for the revision of the law on the subject, but also as to the lines on which such legislation should proceed. It was agreed that the extent of the vitiation of the air, as determined by the amount of carbonic acid gas it contained, seemed to afford the most workable basis for a standard of ventilation and for legislation. The Association, however, preferred not to take formal part in the enquiry into the extent to which the air in mills was vitiated, which it was proposed to make as a necessary preliminary to any legislative change.

"A full report has been submitted to Government, who have authorised the Chemical Analyst to Government to undertake an investigation into the state of the air in Bombay Mills with a view to the acquisition of data and the determination of the maximum allowable amount of carbonic acid gas.

"The results given by an apparatus obtained from England of the type used by the Departmental Committee on the ventilation of the factories were found inconsistent and unsatisfactory. It has therefore been necessary to delay the investigation pending the arrival of another apparatus which, it is understood, is of an improved type."

It ought to be recorded that, as a matter of fact, no admission of a "necessity for the improvement of the ventilation of Bombay and other mills" was invited or made at the discussion in question, while the sense in which the delegates of the Association advocated "the revision of the law on the subject" was that they desired abolition of the impracticably stringent rules which they had been instrumental in exposing.

FACTORIES ACT.

Shuttle Guards.

(*See Reports*, 1902, *pp.* 35 *and* 102 ; 1903, *pp.* 26, 65.)

The Association received a further communication from the Chief Inspector of Factories on the above subject, under date 1st March 1904. The letter—which contained details as to the manner in which the guards to be used in mills could be made effective and kept in proper order—was in due course circulated for the information and guidance of members of the Association and elicited some interesting but inconclusive replies as to the relative merits of various types of guards. (*Appendix* **F.**)

BOMBAY'S RAILWAY COMMUNICATIONS.

System Reconsidered.

By a letter, No. 2029, dated the 13th August 1904, the Government of Bombay in the Public Works Department invited the opinion of the Committee on a whole range of questions involving a radical reconsideration of the railway system existing in the town and island of Bombay. The letter was accompanied by a number of documents bearing upon the question, and embodying the views of various officials with regard to it; but it is impossible to summarise the contents of those papers, and they will be found in the Appendices. They should be read with care, and special attention may with advantage be given to the note by the Chief Engineer of the Public Works Department, Bombay, dated 1st June, which summarises in the fewest words the broad issue to be considered. The second and third sentences of that note give the gist of the matter and may with advantage be quoted here.

"In my opinion the narrow island of Bombay is getting dangerously con-
"gested, both from the sanitary and commercial points of view, and I think, unless
"Government at once look forward and lay down some definite lines on which
"further extensions of Railways, Tramways, Mills, Workmen's houses, etc.,
"should be permitted, there is great probability of mistakes being done that
"will be very costly to remedy in the future. The time is past when individual
"cases can be settled without referring to some general plan, and therefore some
"defined policy is necessary in dealing with giving up land and permitting struc-
"tural extensions as well as other buildings or sidings."

A Special Committee of eight members and the Chairman was appointed, and after the papers had been studied by them, arrangements were made with the Port Trust whereby the Special Committee visited and inspected the sites of the new docks and of the central railway depôts, and the alignment of the Harbour Branch Railway. On the occasion in question the Committee were politely accompanied by the Chief Engineer and the Traffic Manager of the Port Trust, who gave them all information.

The recommendations of the Special Committee were embodied in a report which was submitted to the General Committee on the 17th November 1904, and they were, with trivial modifications, adopted by the General Committee and communicated to Government by a letter, dated the 21st November, which will be found with the other papers among the Appendices. (*Appendix* **G.**)

SHORT REELING OF YARNS IN INDIAN MILLS.

(*See Association's Reports for* 1902, *p.* 11 ; 1903, *pp.* 44, 135.)

As was mentioned in the foot-note on page 46 of last year's Report, it came to the knowledge of the Committee in April 1904 that, a short time before, papers on this subject, additional to those known to the Association, had been forwarded by Government to the Bombay Chamber of Commerce for opinion.

The Committee accordingly addressed the Government of India requesting to be furnished with copies of the correspondence. The Committee at the same time represented that it was as much to the interest of Government as of themselves that no measures should be instituted without the fullest consideration of every argument founded on real knowledge of the trade.

On the 19th May the Secretary to the Government of India, Department of Finance and Commerce, in forwarding the papers asked for, **stated that Government was in entire agreement with the Association that no measures should be taken in respect of short reeling of yarn until Government had been placed in possession of a full expression of the views of persons interested in the industry.** It was added that the question was one which concerned not merely the manufacturer but also the trade at large, and it would therefore be necessary that any observations which the former might desire to make should be considered, and if need be criticised, by the recognised representative of the mercantile public, *i.e.*, by the Chamber of Commerce. For this reason it was suggested that it might save time if the representations of the Association were forwarded first to the Chamber in order that the latter might submit their own comments at the same time. Government also expressed the opinion that it would be convenient and would prevent delay if this course were followed in similar cases in future.

The Committee replied on 9th June 1904, stating that they noted with satisfaction that the Government of India did not intend taking any measures in respect of the short reeling of yarn until they had been placed in possession of a full expression of the views of representatives interested in that industry, and that the Committee had, at the time, no further observations to offer or to add to their representative's minute of dissent with which the Association was in entire accord.

The Committee, however, stated, in reference to the remarks contained in Government's letter, that the observations and criticisms of the Bombay Chamber of Commerce would practically be the observations and criticisms not of those interested in the industry, but of those whose interests were by no means reconcilable with those of the Association, and that the procedure suggested by Government would be highly unsatisfactory and prejudicial to the Association's interests. Furthermore, they urged Government to favour the Association with an opportunity of expressing its views on the various criticisms and observations obtained by Government before the final adoption of definite measures, and expressed the hope that Government might be able to see their way to accede to this request. It was added that the information obtained by Government to the

effect that Indian hand weavers were not injuriously affected by the practice of short-reeling (regarding the existence of which to any material extent involving legislation the Committee had much doubt) was exactly in accordance with prevailing facts, as these buyers knew quite well what it was that they were purchasing. To penalise manufacturers by impracticable enactments, and that too on inadequate evidence, was not, the Committee submitted, the object of Government, and they therefore considered that any legislation in the matter was not called for. If, however, the Government of India decided to adopt new measures, the Committee submitted for favourable consideration the statements made by the members of the Association at the Annual General Meeting held on 15th April 1904* to the effect that, unless the alterations and modifications contained in their representative's minute of dissent were accepted, the procedure recommended by the Committee appointed by Government would be found unworkable in practice and also unsatisfactory to Government as well as to the mill industry.

Under date 18th June 1904 the Government of India replied stating that the request made by the Association was inadmissible and could not be entertained, seeing that it was contrary to the accepted practice followed by Government in dealing with such matters.

That being so, the Committee could only await the ultimate decision of Government, relying on the weight of the considerations that they had been able to advance against the proposal for legislation ; and in this they were not disappointed, for later in the year, *i.e.*, on 19th October 1904, the following Press *Communiqué* was issued by the Finance and Commerce Department ;—

> " In September 1903, a Committee was appointed by the Government of India to consider the question of adopting measures to prevent the short-reeling of yarn in Indian mills for sale in India. Their report was received in October of the same year, and the Local Governments and Chambers of Commerce were consulted as to the practicability of the suggestions formulated by the Committee. Their replies have now been received, and they disclose great diversity of opinion both as to the necessity for any remedial measures, and as to the practicability of the course proposed by the Committee. The consensus of opinion appears opposed to the acceptance of the recommendations made by the Committee, and the Government of India have therefore decided to take no further action in this matter for the present."

The Committee feel that, much as they condemn any systematic short-reeling of yarn for sale in India, they have reason to congratulate themselves on the result of their efforts in this matter, and owe warm thanks to their able Chairman (Mr. Sassoon J. David) who represented them on the Government Committee.

At the Conference of Chambers of Commerce held in Calcutta in January 1905, the following Resolution on this subject was proposed by the Bombay Chamber of Commerce :—

> " That this Conference having noted that Government does not intend to enforce the law against short-reeling considers it incumbent on Government to state the steps they propose to take to place imported yarns on the same footing as those made in this country."

---

* See pp. 175-6 of Association's Report for 1903.

The Resolution was ultimately adopted in the following terms :—

"That this Conference should call the attention of Government to the practice of the short-reeling of yarn in India for local consumption, and would request that steps may be taken to put a stop to this reprehensible practice."

The report of the discussion which took place at the Conference on this subject will be found in *Appendix* **H.**

REPRESENTATION OF THE ASSOCIATION ON THE BOARD OF THE VICTORIA JUBILEE TECHNICAL INSTITUTE.

In November 1904, Mr. Bomonjee Dinshaw Petit, who has, for many years, represented the Bombay Millowners' Association on the Board of the Victoria Jubilee Technical Institute, applied to the Committee for six months' leave of absence from the meetings of the Board on the ground of continued ill-health.

On 19th November, the Committee addressed the Honorary Secretary of the Institute asking that the leave applied for be granted, and that Mr. Jehanghir Bomonjee Petit be appointed to act as a Trustee during Mr. Bomonjee's absence.

At a later date the Committee received a letter from the Honorary Secretary of the Institute, giving cover to copy of a communication from the Bombay Government, inviting attention to **No. 9 of the Rules of the Institute**, and stating that if the Board of the Institute had granted leave of absence to Mr. Bomonjee, he did not cease to be a Trustee, and that there was therefore no vacancy to which Mr. Jehanghir could be appointed.

The Rule referred to reads as follows :—

"If any person is absent from the meetings of the Board for a period exceeding 12 consecutive months without leave, he shall cease to be a Trustee."

The Committee on receipt of the above communication again addressed the Honorary Secretary of the Institute on the subject. They pointed out that the representative of the Association on the Board of the Institute held office, subject to the Rules forwarded to the Institute under letter, dated 2nd August 1902, and recognised by the Board, after some correspondence, on the 23rd January 1903. In the correspondence and at the Conference which intervened between these two dates, it was explained that the Committee considered it necessary to provide for effective and continuous representation on the Board, and believed that the consent of the members of the Association to any renewal of the grant hitherto made by them might be found to be contingent on such continuous representation. The Committee quoted No. 5 of the Rules of the Association which reads as follows :—" . . . . in the event of the Association's representative applying for leave of absence, the Committee may, if they think fit, and with the consent of the Board of the said Institute, appoint a substitute, who shall hold office until the representative whom he replaces resumes attendance or up to that date at which the representative whom he replaces would, under Rule 2, have retired."

It is true, the Committee stated, that in the case now under discussion, they thought themselves entitled to take the consent of the Board for granted; and the fact that such consent existed was marked by the circumstance that the name of the substitute was duly communicated by the Institute to Government. The objection therefore proceeded from Government and was of the nature of a repudiation of the Rules made by the Bombay Millowners' Association under sanction of the Institute's letter quoted above. It had always been assumed that any steps that might be necessary for procuring the recognition of those Rules by Government and for the avoidance of such a situation as had arisen, had been taken by the Institute some two years ago. The Committee accordingly asked the Honorary Secretary to make to Government such representations as might procure the recognition of the said rules.

In the opinion of the Committee the Rule quoted by Government relates solely to the cessation of a Trustee's appointment, which was not in question. It has no bearing upon the making of an acting appointment; and the circumstance that the Rules of the Institute do not at present contain any provision for such appointments would, the Committee consider, be probably not recognised by the body of members as justifying any waiver of that desire for continuous representation on the Board which has been increasingly regarded as a condition of the Association's contribution to the funds of the Institute. The Committee therefore expressed the hope that the Institute would be able to obtain from Government an express recognition of the Rules made by the Association in this behalf; and they asked that the matter may be treated as urgent, seeing that the annual general meeting was to take place shortly, and that it may then become necessary for the Committee to justify any proposal they might be prepared to make to the general body of members regarding further contribution to the funds of the Institute. The Committee added that they were aware that the need for appointing a substitute in the room of Mr. Bomonjee Dinshaw Petit had lapsed through his resumption of his seat on the Board; but they were of opinion that the matter should be put on a sound basis with a view to the possible occurrence of similar cases in the future.

In the Appendix will be found the correspondence which the Association had with the Institute in 1902 (*Appendix* **I**).

YARN RATES OF FREIGHT TO CHINA.

(*See Association's Reports*, 1901, *p.* 36; 1902, *pp.* 18 *and* 70; 1903, *p.* 36.)

Under date 1st December 1904, the Committee received a Circular letter on the above subject from the P. & O., Austrian Lloyd's, Rubattino and Nippon Yusen Kaisha Steamship Companies. The letter stated that rates on Indian yarn to the Straits and China had, since the earlier part of 1903, been at an exceedingly low figure, the reduction having then been agreed to by the above Companies with a view of meeting the depression in trade of which the Millowners had complained; that rates of freight to all Western Ports were, at the time of writing, on a higher basis than they had been for some time, and this, in conjunction with the additional risk involved in sending steamers to the Far Eastern Ports, had compelled the steamship Companies to ask for a better return

for the regular services rendered; and that in order that the business may be effected in the least possible degree, the Companies had agreed "on a most moderate increase of freight," to come into force on and after the 1st January 1905.

The rates proposed were as follows:—

Twist, Cotton Wool, and Indian Piece Goods.

To Straits and Hongkong per ton of 40 cubic feet ... Rs. 14
To Shanghai ... ... „ 18

Wool Twist and Indian Piece Goods.

To Japan per ton of 40 cubic feet ... ... Rs. 18

With a rebate of 25 per cent. on the freight to firms confining all their shipments for the Straits, China and Japan exclusively to the steamers of the Companies concerned.

On 6th December 1904 the Committee addressed a letter to the above-mentioned Companies. With regard to the first reason, assigned for the proposed enhancement, namely, that rates of freight to all Western Ports were higher than they had been for some time, the Committee pointed out that this was in no way borne out by the information which they had procured from other sources. Quotations received indicated on the contrary that forward rates for Western Ports were lower than those that had been ruling for the past four months. With regard to the second reason advanced by the Steamer Companies, namely, that shipments to the Farther East involved abnormal risk, the Committee represented that such additional risk, as attended the conditions existing in Eastern Waters, directly affected the cargo quite as much as the ship. If the shipowner may lose his ship, so may the shipper lose his goods. It was therefore not equitable that a shipowner should ask his shipper to indemnify him from a risk which both ought to share *pro rata* of their respective interests. Moreover the degree of risk depended very largely on the manner in which the Shipping Company conducted its business, and the thoroughness with which it discarded cargo that might be regarded by either belligerent as contraband of war. The shipper had no power to influence the shipowner in this matter. The shipowner had absolute power to determine what degree of risk should be borne by the merchant in common with himself. So on this account also, the Committee pointed out, it would be inequitable that merchants should be called upon to compensate the shipowner for his share of a risk which he alone could, by his own acts, increase or diminish. The Committee added in conclusion that the trade had to bear its own risk and to meet from its margin the additional insurance charges in respect of that risk. They, therefore, considered that shippers ought not to be asked to bear also the risk proper to the carrying trade. (*Appendix* **J**.)

COTTON CULTIVATION.

Selection and Distribution of Seed suitable for Sowing.

From the Bombay Government the Committee received, under date 4th November 1904, a copy of a communication (with accompaniments) from the

Government of India relating to proposals for the improvement of cotton cultivation, with special reference to the selection and distribution of seed suitable for sowing ; and the opinion of the Association was invited on the suggestions made by that Government. The measures which the State proposed to take for the assistance of the cultivator were those which involved scientific research and were classed under the following heads :—

(1) The botanical examination and classification of all existing varieties of cotton, both wild and cultivated.

(2) The introduction of better varieties and improved methods of cultivation.

(3) The provision and distribution of good seed of the varieties ordinarily grown.

Para. 5 of the letter from the Government of India stated as follows :—

"There is abundant evidence to show that one of the main causes of the general deterioration which has occurred in the quality of the cotton produced in many parts of India is carelessness in the selection of seed, which is fostered to a considerable extent by the practice which has become general in recent years of sending all cotton grown to ginning-mills and getting back from them for sowing purposes any kind of seed they happen to have ready for sale. Thus Sir G. Watt referring to the influence of ginning-mills writes : Each of these received, ginned and baled the cotton from thousands of cultivators, the produce often of the most diverse soils, and mixed them together, the result being that the seed given back to the cultivators was equalised and degraded by the loss of the special properties that it had taken thousands of years to evolve. The British Cotton-Growing Association remark that the various classes of cotton in India are often mixed, and consequently the quality has very much deteriorated and the bulk of the cotton grown is nowhere as good quality as it was twenty years ago. They attribute this to the mixing of all sorts of seed by the cultivators or at the ginning mills, and urge the importance of enabling the peasant to obtain pure seed at a reasonable or even nominal price. The Inspector-General of Agriculture writes : the advent of ginning factories has not tended to deteriorate quality and introduce admixture in the Broach and Surat Districts (where high class cotton cultivation is practised) but they have had that effect in many parts of India. Deterioration in cotton must occur unless seed from the most productive plants in each year is saved for sowing. The custom of hand-ginning at home for seed purposes prevails in some districts, but the custom of getting any description of seed from the ginning factories is much too common. Mr. Greenway, of the firm of Messrs. Shaw Wallace & Co., who is the principal promoter of the Indian Cotton-Growing Syndicate, and who has practical experience of the subject, considers the inferiority of the seed commonly sown to be one of the chief evils to be dealt with, and strongly advocates cultivation and distribution of selected seed. A member of the firm of Messrs. Ralli Brothers testifies to the decline in the long-stapled cotton of the hilly tracts of Berar, and attributes it principally to the seed being mixed in the ginning factories which have sprung up in late years, and being bought and sown mixed by the Kunbis."

Copies of the papers were in due course circulated to members for an expression of their views, and on 21st January 1905 the Committee addressed Government stating that the Association heartily commended and welcomed the scheme. It appeared to them to be both practical and well considered ; and they expressed the hope that so useful and promising a project might not be frustrated by any delay in the assignment of funds sufficient for the employment of an adequate number of selectors. The Committee emphasised the consideration that the mixing of seed at ginning factories, which

had played so large a part in the deterioration of the Indian staple, and which in this sense was specifically alluded to in the para. of the letter from the Government of India quoted above was enabled by modern transport facilities to exert a pernicious influence of extraordinarily wide range and intensity. For this reason, the Committee submitted, a relatively small sum expended now in arresting the evil would produce results greater than could be obtained by the outlay of much larger sums later on. (*Appendix* **K**.)

AGRICULTURAL CONFERENCE.

The Director of Land Records and Agriculture, Bombay Presidency, addressed the Association, on 20th July 1904, stating that it was proposed to invite a few gentlemen interested in agriculture to meet the officers of the Department and the Inspector-General of Agriculture in India, in Poona, on a date to be appointed. The object of the meeting was stated to be that of communicating to the gentlemen in question information as to what was being done by Government and receiving suggestions as to useful lines of further development; and the Association was asked to send a representative. Mr. Narandas Purshotamdas was appointed to represent the Association, and his name was, in due course, communicated to the Director.

The Conference took place at Poona on 2nd September 1904 in the Office of the Director.

After a formal opening of the proceedings by the Honourable Mr. Lamb, the Director gave a resumé of the work done by his Department during the past, and stated his expectations for the future. It appeared from his statement that a very great advance had been made in experimental cultivation of crops in the Presidency during recent years. There are two farms at Poona, where experiments in the growth of long staple cotton, groundnuts, fodder crops, oil-seeds of all kinds and sugarcane are being scientifically carried on. A farm has also been established at Surat, where similar experiments are conducted. At Kaira in Guzerat and Dharwar in the Southern Mahratta country, two more experimental farms were opened in 1903 and 1904.

Mr. Fletcher, the Deputy Director, stated, in answer to members, that the reason why long staple cotton could not so far be produced in India was the brief period of growth of the plant. He explained that in America from the time the cotton was sown up to the period of harvesting eight or nine months elapsed. In India the period was only three months. This must always militate against success in the growth of the exotic species. Experiments, however, in hybridization were being vigorously prosecuted, and the production of a fairly long staple cotton, on an extended scale, would in time be feasible.

A resolution was adopted for the establishment in the Presidency of a large central farm, where questions under the following heads, among others, might be considered:—The best methods of cultivation of plants already being grown for profit, with a view to improving these; the prevention and cure of diseases associated with cultivated plants; the introduction of new and untried plants of possible economic value; the improvement by selection and other scientific methods of economic plants; the determination of the value of various manures for different crops and so forth.

REGISTRATION OF TRADE MARKS IN CHINA.

Hitherto there has been no provision for the registration of Trade Marks in China. This unsatisfactory state of affairs has now come to an end, and the Chinese Government has made arrangements for the effective registration of such marks. According to these regulations "priority of right will be granted to the first applicant for any given mark, subject to no satisfactory objection being lodged there against within six months."

The Committee were favoured by a member with a copy of the regulations in question and they are now printed in the appendices to this report. It was originally intended to bring the regulations into force from 23rd October 1904, but, in view of the objections raised in some quarters to certain of the stipulations, and principally as a result of the representations by the German, Austrian, French, Italian and British Ministers, the Chinese Government had, towards the end of the year, undertaken to discuss the proposed amendments, and in the meantime not to register trade marks until there was a complete agreement among the powers. (*Appendix* **L**).

PROPOSED COMMERCIAL MISSION TO PERSIA.

In the middle of June 1904, the Bombay Chamber of Commerce addressed the Association to the effect that the former had for some time been in correspondence with the Government of India on the subject of a Commercial Mission to Persia; and in handing the Association a copy of a further communication received by the Chamber from Government in the matter, invited the Association to make any suggestions, with a view to facilitating the work of the Mission in the direction of developing trade between India and Persia. The Chamber at the same time asked the Association to depute two representatives to join the Sub-Committee which had been appointed by the Chamber to consider the matter.

In regard to the itinerary to be followed, it was proposed that the Mission should reach Bunder Abbas, their starting point, about the end of September, and after a short halt strike northwards to Saidabad in Sirjan, thence to Bahramabad in Rafsinjan, the chief centre of the Cotton trade of the Province, and a place of considerable importance, and from there to Kerman, where the best means of developing trade and commerce could be investigated. From Kerman it was suggested that the Mission should proceed to Bam and Narmashir, an important centre on the Bunder Abbas-Seistan trade route, and thence taking the Gishu Pass *en route* to the fertile valley of the Bampur River. It was further proposed that the return journey, if time permitted, might usefully take the line *via* Magas, Kuhak, and the Kej Valley to Gwadur or Pasni.

The Association, on the 22nd June 1904, acknowledged the receipt of the Chamber's letter, and stated that Mr. Sassoon J. David and Mr. S. A. Nathan had been deputed to represent the Association on the Sub-Committee referred to. A meeting of the Sub-Committee was subsequently held, and on 18th August 1904 the Chamber addressed a further communication to the Association, stating that the Committee had been in negotiation with Mr. Dhunjishaw Muncherji Kapadia and Mr. R. P. Massani (of the Municipal Corporation) with the view of

these gentlemen proceeding to Persia as delegates on behalf of the Chamber and the Association, and that the gentlemen named having consented to accompany the Mission, the Chamber's Committee proposed to submit their names for the consideration of the Government of India. It was at the same time suggested that the expenses of the delegates should be shared by the Chamber and the Millowners' Association.

The Association approved of the delegates nominated by the Chamber of Commerce, but desired it to be clearly understood that the Association's contribution towards the expenses should not in any case exceed Rs. 2,000.

On the 3rd October 1904, the Chamber, in a further communication, informed the Association that as the extent of their liability was indefinite and the Government of India were unable to undertake the management and responsibility, the Chamber had decided to withdraw from this Mission, and had informed the Government of India to this effect. *(Appendix* **M.**)

CONFERENCE OF CHAMBERS OF COMMERCE OF INDIA AND CEYLON.

In view of the above Conference, which it was notified would be held in Calcutta under the auspices of the Bengal Chamber of Commerce in the first week of January 1905, the Committee, under date 17th December 1904, telegraphed to the Bengal Chamber, stating that it was generally assumed that the Association would be represented at the Conference; that such representation was most desirable if decisions on industrial questions were to carry weight, and that they desired to be informed whether a representative might be deputed. In confirming this message, by letter, the Committee stated that they were moved to make this request by consideration of the fact that resolutions dealing with various industrial matters, in which they were deeply concerned and thoroughly experienced, were to be submitted at the Conference, and that the decisions to be arrived at on these questions would to a considerable extent be discounted and discredited if it were known that a body of the standing of this Association had been excluded from the deliberations. The Committee added that the circumstance of their having received no invitation to participate had probably been due to a mere oversight; and they recognised that the Bengal Chamber might reasonably have expected that some movement in the matter should have been made by the Association at an earlier stage; but they explained that they had no information about the arrangements for the Conference till the recent publication of the programme.

The Bengal Chamber replied that as the Conference was essentially a gathering of Chambers of Commerce only, it would not be possible to give the Association *locus standi* as such, but that there would be no objection to the Association's representative attending as a delegate of the Bombay Chamber, provided he could be nominated as such by that body.

In reply, the Committee stated that they did not consider any useful purpose would be served by their attending the Conference on the footing proposed to them.

The Committee, in a further representation to the Bengal Chamber, under date 30th December 1904, pointed out that since one of the rules of the Conference was that each Chamber could give only one vote irrespective of the number of its delegates, such representation as was proposed would be valueless to the Association, and on these terms they preferred not to be represented. They considered that if the Conference had proposed to deal only with subjects in which commerce proper or the distribution of commodities was concerned and not with questions relating primarily to industries and manufactures, no objection could have been taken to the constitution of the Conference as it stood. On the other hand, if the Associations representing Indian industries and manufactures had been invited to participate in the discussion of questions affecting their large interests, the pronouncements of the Conference on such questions might have been accepted as authoritative and have claimed a certain assent from all parties. But several of the resolutions to be discussed at the Conference dealt with matters that concerned Indian industries almost exclusively, and yet those persons, who were by experience most thoroughly qualified to say how those industries would be affected by the measures proposed, were excluded from the deliberations affecting their interests. This being the case the Committee submitted that no pronouncement upon these matters made by a Conference of Chambers of Commerce as constituted in India, and from which the representatives of the Indian industries were excluded, could claim to be authoritative or responsible.

The Committee added that, in their opinion, the time had gone past when it was harmless or permissible for Chambers of Commerce to ignore the distinctive position that Indian industries had acquired and to claim the right to dispose of and pronounce upon matters affecting the interests of manufacturers. The Industrial Associations of India had, they submitted, scrupulously abstained from concerning themselves with matters that fell more particularly within the province of the Chambers of Commerce as constituted in India, and the Bombay Millowners' Association regretted the more that their exclusion from the deliberations and from the voting of a Conference, which claimed authority to make pronouncements upon matters that fell in clearly within the province of manufacturers, should compel them to take steps to record and make known their formal protest, against the Conference laying any claim to such authority.

In conclusion, the Committee asked that their representation be laid before the Conference with a view to define their position as regards future Conferences. At the same time they directed attention to the fact that one Chamber of Commerce had invited the Association to second a resolution to be proposed by it, evidently assuming that the Association would be represented; while another Chamber had telegraphed to say that they would support the request of the Association for representation.

The Bengal Chamber, however, were unable to accede to the Committee's wishes, as they maintained that to depart from the principle previously laid down would be to admit the right of independent representation on the part of other similar Associations—of which there were several in connection with that Chamber—which might equally claim a right to direct representation.

The following extract is taken from the published report of the proceedings of the Conference :—

The President (on the third day's meeting of the Conference) said :—

"Before we begin this morning's work, Gentlemen, I would invite your attention to the letter addressed by the Bombay Millowners' Association, to the President of the Bengal Chamber of Commerce, Calcutta, which, together with copies of correspondence that has passed between our Chamber and the Millowners' Association, has been circulated to you. I will not delay you by going over it all. There is, however, our letter of 31st December to the Millowners' Association, which obviously could not be included in that correspondence, and which, I think, should be read here. . . . .

"Our Committee decided to ask the Millowners' Association to get the Bombay Chamber to nominate one of their representatives as a delegate, but that has not been done. They do not choose to come here as representatives of the Bombay Chamber, and in this letter you will see that they made some sort of protest against the action of the Bengal Committee in not having invited them. This Conference, I would say, was originally started as a Conference of Chambers of Commerce. It was, however, impossible to admit the Millowners' Association without granting the same concession to other Associations in Calcutta and elsewhere. It may be advisable at some future Conference to include these Associations, but it was impossible to do so at this Conference. We might reply that their letter and protest have been put before the Conference, who see no reason to differ from the action taken by the Bengal Chamber of Commerce."

It must be remembered that the first intimation received by this Association that such a Conference was to be held and that it was proposed thereat to discuss and to vote upon sundry matters primarily affecting Indian industries as distinct from external trade, was obtained from a notice published in the Bombay local press on the 14th December 1904. In that notice it was stated that the Conference would meet in Calcutta on the 3rd January 1905, and the subjects to be discussed were named. A number of these subjects related—some mainly, others entirely—to Indian industries and manufactures ; and the Committee viewed with grave misgivings the prospect that Government might be invited to regard as authoritative and responsible such votes as might be cast on those subjects by a Conference comprising only the Chambers of Commerce as constituted in India. The Association fully recognises the value of the Chambers of Commerce in relation to those branches of commerce with which the members of those Chambers are most fully acquainted; but it would be vain to pretend that the pronouncements of those bodies upon other matters have in all cases appeared to the Committee to be judicious or impartial. The question of the short reeling of yarn is one which Government have most fortunately recognised the inexpediency of entering on a course of legislation advocated by certain Chambers. Though citing this one example, the Committee do not wish to controvert even those pronouncements of the Conference which seem to them least sound. Nor must they be understood as advancing any claim to speak upon questions of external trade, or the distribution of commodities with an authority which they deny to the Indian Chambers of Commerce in respect of manufactures. But when they see a series of *ex-parte* pronouncements upon industrial matters placed before Government by the Chambers of Commerce as an expression of collective commercial opinion in the broad sense of that term, the Committee conceive they must either abandon and jeopardise the interests they exist to protect, or must enter a formal *caveat*,

The Committee consider that even if it became necessary to change the name of the Conference to some such style as the "Commercial and Industrial Conference" or the "Conference of Indian Commerce and Industry," its practical usefulness would not be thereby injured, while such alteration in its constitution as would result from the inclusion of the chief industrial Associations could only add to the weight of its pronouncements. It will be understood that the Association in this matter is not acting solely in its own interests, but if the principle for which it contends be conceded, the other Associations mentioned by the Bengal Chamber of Commerce may be relied on to take such steps as they may deem necessary on their own behalf. And since it has been suggested that it might be difficult to discriminate between Associations of serious importance and others that might without disadvantage be excluded from participation in the Conference, the Committee consider it might be sufficient if all those Associations were admitted whose membership included public companies with an aggregate capital of one crore of rupees. (*Appendix* **N**.)

DONATION TO THE J. J. HOSPITAL NURSING FUND.

At the Annual General Meeting held on the 15th April 1904, sanction was given to the payment of a sum of Rs. 500 as a donation to the J. J. Hospital Nursing Fund; and the Committee, recognising the services rendered by the hospital to numbers of persons employed in Mills in Bombay, propose to ask the Members at the forthcoming Annual Generel Meeting to make a similar donation for the year 1905.

REVISION OF TARIFF VALUES UNDER THE INDIAN COTTON DUTIES ACT.

On 19th May 1904, the Collector of Land Revenue, Customs and Opium, Bombay, informed the Association that the half-yearly revision of the tariff values of Cotton Goods, under the Cotton Duties Act, was under consideration, and that the Director General of Statistics had asked that proposals on the subject should be submitted as early as possible. It was explained that the then market values of Grey Goods had departed sufficiently widely from the tariff rates to call for some revision, but that the same necessity did not apparently exist in the case of "Figured and Coloured Goods." The Collector at the same time forwarded a tariff list with gross market values and proposed revised tariff rates marked against each item of the former class. It was proposed by the Collector that "Figured and Coloured Goods" should not be dealt with at the time. The Collector asked for the views of the Association previous to a meeting being arranged for the discussion of the various items.

The Committee, in addressing the Collector under date 24th May 1904, stated that, while generally approving of the revised list of valuations, they considered the institution of a procedure to revise these rates in the middle of the year was likely to hamper trade and affect running agreements. They, therefore, submitted that the revision of the tariff should, as on previous occasions, be undertaken at the end of the year, and that the revision contemplated by Government at the time of writing should stand over meanwhile.

It was eventually decided by Government that the readjustment of the tariff values should remain in abeyance till the end of the year.

In the middle of November 1904, the Collector addressed the Association stating that Mr. Robertson, the Director-General of Statistics, proposed visiting Bombay at the end of that month in connection with the annual tariff revision. A Sub-Committee was, as on previous occasions, appointed to meet Mr. Robertson, and at a meeting held on 23rd November 1904, the tariff schedule, embodying the alterations in classification and in prices was discussed, and it was agreed that the values proposed by Mr. Robertson should, with certain modifications, be submitted to the Government of India for adoption.

Under date 20th December 1904, the following notification was published by the Government of India containing the revised tariff values :—

FINANCE AND COMMERCE DEPARTMENT.

SEPARATE REVENUE.

COTTON DUTIES.

Calcutta, the 20th December 1904.

No. 8030 S. R.—In exercise of the power conferred by Section 7 of the Cotton Duties Act, 1896 (II of 1896), and in supersession of the Notification in this Department, No. 7778 S. R., dated the 18th December 1903, the Governor-General in Council is pleased to fix, for the descriptions of cotton goods hereunder specified, tariff values as follows with effect from the 1st January 1905 :—

	GREY GOODS, PLAIN OR BORDERED.	Tariff value per lb. As. p.
1.	Bed covers, bedsheets, and chadars, twilled, with borders not over ½″	8 3
2.	Chadars and bedsheets, plain, or with borders not over ¼″ ...	8 0
3.	Dangari of Khadi cloth	6 6
4.	Dhuties, cholas, dupattas, and lungis, plain, or with borders not over ¼″	8 0
5.	,, ,, ,, ,, ,, or with borders over ¼″ but not over 1½″	8 6
6.	Dhuties and patals with headings over 4″ wide and coloured borders	9 0
7.	Domestics, T. cloths, shirtings, longcloth, sheetings with borders not over ¼″	8 0
8.	Drills and jeans, plain	8 3
9.	Fents	7 0
10.	Printers	8 3
11.	,, (bhagavad)	7 9
12.	Shirtings, twilled, unbleached	9 6
13.	,, ,, bleached	10 6
14.	Tent, sail commissariat, and double threaded cloth (dosuti)..	7 3
15.	Zanzibar cloth, including American cloth	8 0

Provided that for calendered grey goods 3 pies shall be added to the above values.

FIGURED OR COLOURED GOODS.

16.	Bed covers, quilts, and table cloths, with borders not over ½″.	8 3
17.	Bed covers, quilts, table cloths, twilled sheets and chadars, coloured warp or weft.	8 6
18.	,, ,, twilled sheets and chadars, coloured warp and weft	10 0

	FIGURED OR COLOURED GOODS—*contd.*	Tariff value per lb. As. p.
19.	Bed ticking, plain or drilled	9 0
20.	Chadars, twilled, coloured (shawl check)	11 9
21.	Chadars, not twilled, coloured, calico wove, shawl pattern ...	10 6
22.	Cholis and saris (coloured)	11 9
23.	Cotton tweed, commonly called hunting cloth, plain or striped including leheria, Thana susi, Thana twill, and Thana check	10 3
24.	Other cotton tweeds and English checks, trouserings, and coatings	11 6
25.	Drills and jeans, striped	8 9
26.	„ „ checked	9 9
27.	„ „ khaki dyed	12 0
28.	Fents	7 9
29.	Lungis, unbleached, coloured striped and borders	8 6
30.	„ coloured	10 3
31.	Madras cloth	10 0
32.	„ „ (imitation)	9 3
33.	„ „ twilled, checked or striped, coloured warp and weft ...	11 0
34.	„ „ handkerchiefs or lungis...	12 3
35.	Napkins, unbleached	8 6
36.	„ bleached	9 6
37.	Susi, ordinary, coloured stripes grey ground	9 0
38.	„ „ „ weft	9 6
39.	Ordinary susi checks, grey ground	10 3
40.	„ „ coloured warp and weft	10 6
41.	Fancy dobby pattern checks, coloured warp and weft ...	11 0
42.	Flannel pattern susi and dobby susi, grey weft	9 6
43.	„ „ „ „ coloured weft	10 3
44.	Towels, Turkish, unbleached	9 3
45.	„ „ bleached	10 3
46.	„ „ honeycombs, unbleached	7 9
47.	„ „ „ bleached	8 9
48.	Zephyr cloth	9 6
49.	„ striped and checked	11 0

Provided that any goods specified in the foregoing lists shall, when woven with borders of silk, be assessed to duty ad valorem.

INCOME TAX AND THE DEPRECIATION ON FACTORY BUILDINGS.

(*See Association's Reports*, 1895, *pp.* 20 *&* 186 ; 1896, *pp.* 14 *&* 98 ; 1897, *pp.* 12 *&* 77 ; 1903, *pp.* 31, 32 *&* 33.)

The Association further addressed the Collector of Income Tax, Bombay, on the 7th March 1904, on the subject of the refusal of Government to allow any deduction on account of depreciation of factory buildings to be made in Bombay in calculating the amount of income assessable to Income Tax. The Committee on enquiry found that they were in error in asserting that such deduction was allowed in England, and they explained that the circumstance of their having

been induced to dispense with their customary verification of such points before using them arose from their being very expressly assured by one of their own members that the Collector of Income Tax had himself admitted the fact of such deduction being allowed in England. The Association also furnished the Collector with copies of two letters, received by the Association from leading firms in the United Kingdom, which left no doubt that such deduction was not in fact allowed in England. They submitted that in Calcutta a deduction of 5 per cent. was allowed in respect of depreciation on mill buildings and machinery, renewals of machinery, etc., and stated that while on one hand they were not in the first instance induced to take up this matter by consideration of advantages enjoyed or understood to be enjoyed in other parts, but because of the evident injustice of the practice observed in Bombay; so they did not conceive that questions of fact as to the procedure adopted elsewhere in any way affected the considerations of principle which the Association had submitted, in the latter part of their letter of the 11th December 1903, namely, that the Committee desired to refer to the broad principle laid down by the Government of India for the guidance of the local Governments, namely, that in determining the net income assessable to Income Tax, allowance should be made for such charges as were necessarily incurred for the purpose of deriving the income, and for the purpose of providing against the destruction of the capital from which such income was derived. The Committee considered it would not be denied that buildings in India, and especially mill buildings subjected to continual vibration and traffic, underwent a deterioration that would not be covered by an allowance of 2½ per cent. It was equally clear that such deterioration was in fact a destruction of capital and that the repair of this deterioration was perfectly indispensable to the continued deriving of the income. The Committee were unable to imagine on what principle a provision against an inevitable destruction of capital by the process of deterioration should be denied, an exemption which was accorded to a provision against a possible destruction of capital by fire. They considered that the present system placed a premium upon bad finance, as well as subjecting the trade to a charge that was absolutely and relatively unjust. They accordingly asked that the question be again referred to Government for reconsideration.

The Collector of Income Tax replied on 9th March 1904, to the effect that the points raised by the Association would receive careful attention. (*Appendix* **O.**)

REGISTRATION OF TRADE MARKS.

Amendments of Rules.

(*See Reports*, 1902, *p.* 50; 1903, *p.* 1.)

At the time when the report for 1903 went to press, certain questions relating to the Registration of Trade Marks were under discussion with the Solicitors of the Association. The amendments of the rules, which were recommended by the Committee as a result of the discussion with the Solicitors, were put and adopted at the Annual General Meeting of the Association, at which the said report was submitted. But there had been no time to include in that report particulars of the correspondence. For this reason the letters are printed in the Appendices to this report; and with them are also printed certain memoranda by

the Secretary which explained the reason for undertaking the revisions contemplated. In view of the complexity of the considerations involved, it is not thought expedient to give a greatly curtailed summary of them here; and members who are interested in any particular point are referred to the full text of the papers. The chief matters dealt with were :—

(*a*) Power to any member in certain stated circumstances to decline to arbitrate about his old Trade Marks, and power to the Committee to relegate disputants about such Trade Marks to their remedy at law.

(*b*) The positions in respect of Registered Trade Marks of a member whose membership has lapsed for a time but been revived.

(*c*) The appointment of a Permanent Special Committee for deciding such questions not relating to arbitrations as may arise in connection with the Registration of Trade Marks.

(*d*) The passing of an order that the names of persons becoming members of the Association should be at once intimated to all other members, so that any dispute arising with any such new member may be dealt with in accordance with the rules.

(*e*) The power to acquire a right in a Trade Mark in which a letter of the alphabet or a Royal effigy appears as a prominent or distinguishing feature. (*Appendix* **P.**)

CHANGES IN COMMITTEE.

Mr. Bomanjee Dinshaw Petit, who was elected Chairman of the Association in 1903, found it necessary to relinquish that office in April 1904, owing to ill-health. At the Annual General Meeting, which took place soon after his resignation, it was resolved that Mr. Sassoon J. David be elected Chairman, and the Honb'le Mr. Vithaldas Damodher Thackersey Deputy Chairman of the Association for the year 1905.

In April 1904 the Association learnt with regret of the death of Mr. John R. Greaves—formerly a Chairman of the Association, and an active member of the Committee—which took place on the voyage to England; and at the Monthly Meeting of the Committee, held on the 6th May 1904, it was proposed that the following Resolution be conveyed to the relatives of the deceased gentleman :—

"That this Association records with sincere regret the death of their late colleague, Mr. John R. Greaves, which took place on the 24th April 1904, while on his way to England, and that as a mark of respect to his memory this meeting do now adjourn. That a copy of this Resolution be forwarded to Messrs. Greaves, Cotton & Co., with a request that it be communicated to the family of the deceased gentleman, with an expression of this Association's sympathy in their bereavement."

A month or so after, news was also received of the death of Mr. Jamsetjee N. Tata, and at a Special Meeting of the Committee, held on the 23rd May 1904, the following Resolution was unanimously adopted :—

"That the Committee of the Bombay Millowners' Association desire to place on record their deep sense of the great loss the Industrial Community of Bombay has suffered by the lamentable death of Mr. Jamsetjee N. Tata, who had, by his great energy, perseverance and enterprise, greatly assisted in advancing the material development of the country."

"That copies of the above Resolution be forwarded to Mr. Dorab J. Tata and Mr. Rutton J. Tata, and that the latter gentleman be requested to communicate the contents of the Resolution to the other members of his family."

The Committee have also to record, with extreme regret, the death of Sir George Cotton which occurred in London in the early part of 1905. At the Monthly Meeting of Committee, held on 10th February 1905, the following Resolution was adopted:—

"That the Committee desire to place on record the sorrow with which they, in common with all those who are interested in the Indian Textile Industry, have heard of the death of Sir George Cotton, one of the pioneers of that Industry, one of the founders of the Millowners' Association, and for many years its Chairman.

"That the Secretary is instructed to communicate this Resolution to the family and the firm of the deceased gentleman with an expression of condolence and sympathy in their loss.

"That the Committee do adjourn *sine die* as a mark of respect to the memory of the deceased gentleman."

Mr. H. E. E. Procter proceeded to England in May 1904, and during his absence Mr. T. W. Birkett acted as a member of the Committee.

Mr. Herbert R. Greaves also proceeded to Europe in July 1904, and during the period of his absence Mr. A. Leslie was good enough to act on the Committee.

Mr. Gordhandas Khattaw having resigned his seat on the Committee of the Association on the 16th September 1904, Mr. Dwarkadas Dharamsey was invited by the Association to fill the vacancy, which he consented to do.

Mr. D. C. Shroff also resigned office at the close of the year and was replaced by Mr. Moolraj Khataw.

ELECTRIC POWER PROJECT.

The Association received a communication, dated the 21st May 1904, from Major A. G. de Lotbiniere, R. E., Superintending Engineer, Western Circle, Bangalore, with which he enclosed 20 copies of a Circular letter embracing a scheme for the generation and utilization of electrical power from the Periyar Project for industrial purposes in Southern India. At the same time he suggested that the Millowners of Bombay might consider it worth their while to open Branch Mills at some points near the source of Power,—say within a radius of 100 miles of the Periyar Dam—in the event of his being able to supply them with Electrical Power at a very cheap rate. He pointed out that such ports as Madura, Tinnevelly, Tuticorin, Dindigul, Trichinopoly and Coimbatore, could all be supplied with Electrical Power from the scheme if sufficient demand existed, and that the closer the Mills were situated to the Periyar Dam, the less the Power would cost.

The Committee replied on the 8th June 1904, thanking Major Lotbiniere, on behalf of the Association, for bringing the scheme to their notice. (*Appendix* **Q**.)

MOISTURE IN COTTON, AND COTTON YARN.

The Association received a communication, dated the 27th July 1904, from Mr. C. P. Brooks, Member of the Board of Government, New England Cotton Manufacturers' Association, New Bedford, Mass., U. S. A., in which that gentleman, on behalf of his Association, desired information as to what were the regulations, if any, at the various Cotton Exchanges in India, as to the maximum

allowance for moisture in raw cotton; their by-laws or regulations bearing on this subject, or if there were no regulations, he desired to ascertain what was the custom in case of excessive moisture.

The Committee replied on the 10th September 1904, informing Mr. Brooks that the Bombay Millowners' Association had no rules bearing on the matter referred to by him, but that if there were any such rules in force on his side, the Committee would be glad to have a copy. Mr. C. P. Brooks was good enough to forward to the Association on the 6th October 1904, a copy of his paper entitled "Moisture in Cotton and Cotton Yarn," which was re-printed and copies distributed among the members of the Association. It is now included in the appendices. (*Appendix* **R.**)

EXCHANGE WITH THE FURTHER EAST.

The Association received a communication, dated the 17th August 1904, from Mr. S. Hayashi, Consul for Japan in Bombay, regarding the effect of the closing of the Mints upon the Chinese Trade. He quoted the following passage from the speech of the Chairman of the Association at the Annual General Meeting of members, held on 24th June 1903, namely, "This procedure on the part of the Government, has had the direct effect of lowering the exchange in China, etc.," and desired information as to how the closing of the Mints directly affected exchange.

The Committee replied on the 19th August 1904, and referred Mr. Hayashi to page 105 of the Association's Report for 1902, pointing out at the same time that the closing of the Mints had affected the export trade of Bombay with silver-using countries like China for the following reasons :—The Rupee, which was formerly freely coined for any one tendering silver to the Mint, had then a par value to the silver dollar and sycee in China. Since the closing of the Mints the value of the Rupee had, by the action of Government, been made a fixed one in relation to gold. Consequently, the silver dollar and sycee occupied a different position now in its relation to the Rupee, and exchange between India and China fluctuated according to the price of silver in relation to gold.

HOLIDAYS FOR 1905.

The Committee have, as in previous years, furnished members with a list of the holidays recommended to be observed by the Cotton Spinning and Weaving Mills during 1905.

STOCKS OF COTTON IN BOMBAY.

In accordance with the practice observed in previous years, the Committee after obtaining returns from agents and owners, informed the members, by a circular in the usual way, that the total quantity of cotton held by the Spinning and Weaving Mills in Bombay on 30th June 1904 was 86,046 candies.

STATISTICS.

The usual comparative statements are published in the Appendix showing the imports and exports of piece-goods and yarns for a series of years, together with the annual statement of Cotton Spinning and Weaving Mills working and in course of erection in India on 30th June 1904. The members of the Association have been regularly supplied during the year with the monthly statistical returns published by the Committee, together with the weekly list of quotations of piece-goods and yarn. (*Appendix* **S.**)

APPENDIX A.

BALANCE SHEET OF THE BOMBAY MILLOWNERS' ASSOCIATION.

From 1st January to 31st December 1904.

	Rs. a. p.	Rs. a. p.
To Chamber of Commerce being contribution for office and statistical establishment and for rent	7,200 0 0	
„ Printing	2,306 4 0	
„ Advertisements	70 4 0	
„ Miscellaneous Expenses, Stationery, &c.	636 12 3	
„ Auditor's Fee	100 0 0	
„ Law charges...	199 0 0	
„ Expenses in connection with the registration of Trade Marks ...	915 0 0	
		11,427 4 3
„ Association's contribution to the Victoria Jubilee Technical Institute for 1903-04	.....	3,000 0 0
„ Association's contribution to Sir J. J. Hospital Nursing Fund ...	.....	500 0 0
Balance as under :—		
Government 3½ per cent. Promissory Notes for Rs. 17,000—Cost.	17,186 4 0	
Fixed deposit with the National Bank of India, Ld., for 12 months at 4 per cent.	18,500 0 0	
Fixed deposit with the Chartered Bank of India, Australia and China, for 12 months at 4 per cent.	5,000 0 0	
Cash in the Bank of Bombay	5,411 12 9	
Cash in hand	25 1 0	
Interest not recovered on Rs. 14,000 3½ per cent. Government Paper	1,663 5 5	
	47,786 7 2	
Less—Amount due for wages for December and Auditor's Fee.	1,062 4 0	
		46,724 3 2
Total Rupees ...		61,651 7 5

	Rs. a. p.	Rs. a. p.
By Balance at the credit of the Association on 31st December 1903 :—		
General Fund	42,442 0 6	
Travelling Agency Fund	3,859 2 3	
		46,301 2 9
„ Subscriptions for the year ending 31st December 1904	13,746 9 5	
„ Miscellaneous Receipts	143 4 0	
„ Interest on Government Paper and Fixed Deposits of General Fund and Travelling Agency Fund	1,455 7 3	
„ Arbitration Fee Account	5 0 0	
		15,350 4 3
Total Rupees ...		61,651 7 5

Examined and found correct.

NESSERWANJEE SORABJEE JAMSETJEE,
Auditor.

Bombay, 22nd March 1905.

C. J. MICHAEL,
Acting Secretary.

Appendix B.

Trade Classifications of Cotton in Crop Statistics.

CHAMBER OF COMMERCE,
BOMBAY, *9th March* 1904.

THE SECRETARY,
BOMBAY MILLOWNERS' ASSOCIATION,
BOMBAY.

DEAR SIR,

I am directed to hand you copies of correspondence which has passed between the Bombay Chamber of Commerce and the Director-General of Statistics to the Government of India relating to the classification of various grades of cotton customary in the trade.

Yours faithfully,
FREDERICK NOEL-PATON,
Secretary.

CHAMBER OF COMMERCE,
BOMBAY, *3rd November* 1903.

THE DIRECTOR-GENERAL OF STATISTICS
TO THE GOVERNMENT OF INDIA,
CALCUTTA.

SIR,—Under the instructions of the Committee of the Bombay Chamber of Commerce, I have the honour to communicate to you, for your information, the following facts relating to the classification of various grades of cotton customary in the trade.

2. It may perhaps be known to you that the Chamber of Commerce issues daily, weekly and monthly Trade Returns showing the movement of various articles of commerce. Among these are publications exhibiting the receipts of produce from sundry railway stations in India. For the convenience of the cotton trade these stations are, in the said returns, grouped with regard to the descriptions or qualities of cotton derived from them. These classifications or groupings are ostensibly made on a territorial basis, inasmuch as the various descriptions of cotton bear territorial designations, such as "Berar," "Khandeish," "Dholera," etc. But since it often happens that the production of a grade of cotton known to the trade by one of these territorial designations is not restricted to the true limits of the district from which it takes its name, various stations without these limits are, for trade purposes and in the Chamber's Returns, included in groups or categories to which such stations do not strictly belong.

3. In recent years it has been found that the conditions under which the older classification of the Chamber was adopted have undergone some alteration, and that either (*a*) the cotton received from certain stations is no longer of the class that formerly came from it, or (*b*) that the trade standards differentiating between the various classes of cotton have varied so as to exclude the produce of a particular station from the category in which it formerly stood.

4. It has therefore been found that the older classification of the Chamber is no longer in accordance with the requirements of the trade; and at the instance of the Bombay Cotton Trade Association, the Committee of the Bombay Chamber of Commerce have recently revised and altered the grouping of stations as shown in their published returns.

5. The Committee are aware that in certain Government Returns (*e.g.*, "Area and Yield of Certain Crops" &c.) the yield of cotton is shown under territorial designations which, while certain of them are identical with those used by the trade, are understood to relate

strictly to the territorial districts or divisions. There is thus an essential difference between the classifications observed by Government and by the trade; and while the Committee think it improbable that the two systems could be brought into line, they consider it right that you should have information as to the classification used by the trade. They have therefore directed me to communicate these facts to you and to hand you copies of the "Daily Arrivals" Return of the Chamber with the old and with the new grouping of stations.

I have the honour to be,
Sir,
Your most obedient servant,
FREDERICK NOEL-PATON,
Secretary.

No. 474.

GOVERNMENT OF INDIA,
STATISTICAL DEPARTMENT,
CALCUTTA, $\frac{26th}{27th}$ February 1904.

FROM
THE DIRECTOR-GENERAL OF STATISTICS,

To
THE SECRETARY,
CHAMBER OF COMMERCE,
BOMBAY.

SIR,

In continuation of my letter No. 2442, dated the 1st December 1903, I have the honour to enclose copy of correspondence* with the Director of Land Records and Agriculture, Bombay, from which it will be seen that the revised classification of the varieties of cotton adopted in the daily trade returns of the Bombay Chamber of Commerce has been followed as far as possible in the final forecast of the cotton crop of Bombay for 1903-04.

I have the honour to be,
Sir,
Your most obedient servant,
J. A. ROBERTSON,
Offg. Director-General of Statistics.

Copy of letter No. 2443, dated the 1st December 1903, from the Director-General of Statistics, Calcutta, to the Director of Land Records and Agriculture, Bombay, Poona.

I have the honour to enclose copy of a letter, dated 3rd November 1903, from the Chamber of Commerce, Bombay, with two statements, in original, exhibiting the original and the revised list of railway stations grouped with regard to the descriptions or qualities of the cotton derived from them. The statement appended to your forecasts describes the different varieties of, cotton but I do not know precisely on what basis these figures rest, and I beg to enquire whether there would be much difficulty in making your classification conform to that now adopted by the trade.

I shall be obliged for the return of the statements with your reply.

True copy.
(Signed) C. B. ROGER,
for Offg. Superintendent.

---

* No. 2443, dated the 1st December 1903, to Director of Land Records and Agriculture, Bombay.
* No. A-833, dated 19th February 1904, from the Director of Land Records and Agriculture, Bombay.

Copy of letter No. A-833, dated the 19th February 1904, from H. S. Lawrence, Esq., I.C.S., Director, Land Records and Agriculture, Bombay, Poona, to the Director-General of Statistics.

With reference to your letter No. 2443, dated the 1st December last, I have the honour to inform you that in the recent final forecast of cotton for the Bombay Presidency (forwarded with this Office No. A-750, dated 12th instant), I have so far as possible adopted the revised classification of territorial divisions, and entered separate estimates for the different varieties suggested by the Chamber of Commerce.

The statement received with your letter under reply are returned herewith.

True copy.
(Signed) C. B. ROGER,
for Offg. Superintendent.

Appendix C.

Short Time Movement.

No. 4, CHURCH GATE STREET,
BOMBAY, 23*rd August* 1904.

TO THE SECRETARY,
BOMBAY MILLOWNERS' ASSOCIATION,
BOMBAY.

DEAR SIR,—Taking into consideration the serious out-look of cotton without any corresponding increase in the rate of yarn, we think it would be advisable if all the Mills now combine and work on short time.

This will not make any appreciable difference in the price of cotton but we can work longer with our old stocks that we now have, and the yarn market may go up a little to compensate us for the higher cost entailed owing to short production.

We think this matter is worth considering seriously, and with that view we shall be obliged if you will circulate this letter amongst the members of the Association, and if agreeable call a general meeting of the body.

Thanking you in anticipation for your trouble.

We are, Dear Sir,
Yours faithfully,
P. A. HORMARJEE & Co.
Agents { THE CHINA MILLS, LD., AND
THE MOON MILLS, LD.

MILLOWNERS' ASSOCIATION,
BOMBAY, 27*th August* 1904.

THE MEMBERS OF THE
BOMBAY MILLOWNERS' ASSOCIATION.

GENTLEMEN,

Proposed Short Time in Mills.

The following letter has been addressed to the Committee by the Agents of the China Mills, Ld., and the Moon Mills, Ld. :—

" Taking into consideration the serious outlook of Cotton without any correspond-
" ing increase in the rate of Yarn, we think it would be advisable if all the Mills
" now combine and work on short time. This will not make any appreciable differ-

"ence in the price of Cotton, but we can work longer with our old stocks that we "now have, and the Yarn market may go up a little to compensate us for the higher "cost entailed owing to short production. We think this matter is worth consider- "ing seriously, and with that view we shall be obliged if you will circulate this letter "amongst the members of the Association, and if agreeable call a General Meeting "of the body."

In circulating this letter I am to say that the Committee desire to ascertain the views of individual members as to the above proposal before taking any further action in this connection.

I am, therefore, to beg that members will be good enough to notify below in the respective columns whether or not they favour the proposal.

The Committee consider that the above proposal need not apply to Weaving Mills.

I am, Gentlemen,
Yours faithfully,
C. J. MICHAEL,
Assistant Secretary.

In favour of Short Time.	Against the adoption of Short Time.

MILLOWNERS' ASSOCIATION,
BOMBAY, 12*th September* 1904.

THE MEMBERS OF THE
BOMBAY MILLOWNERS' ASSOCIATION.

GENTLEMEN,

Proposed Short Time in Mills.

With reference to my circular of the 27th August, I am instructed to say that as the majority of the Cotton Mills in Bombay do not favour the adoption of short time, the Committee do not propose to proceed further in the matter.

I am, Gentlemen,
Yours faithfully,
C. J. MICHAEL,
Assistant Secretary.

Appendix D.

Holidays and Sundays in Mills.

BOMBAY, 1*st November* 1904.

THE SECRETARY OF THE
BOMBAY MILLOWNERS' ASSOCIATION,
BOMBAY.

DEAR SIR,

In the monthly return we are submitting as usual to the Inspector of Factories, our closed days include the 7th, 8th; 13th, 20th and 27th instant, the 7th and 8th being Dewali holidays; as these holidays fall on a Monday and Tuesday, we seem to be precluded, under the Factories

Act, 5 B (*b*), from working on Sunday, the 13th, and we shall be glad to know whether the other Mills are observing these dates as holidays, or whether they are working on the 13th. There can be little doubt, we think, that the wording of the Act might be altered to advantage; at present a certain hardship occurs where native holidays fall due, as in the case of this year's Dewali, for the two days fall on a Monday and Tuesday; we can only work on Sunday, the 6th, to cover them, whereas had they happened to have fallen on Wednesday and Thursday, the 9th and 10th, it would have been possible for us without breaking the law to work from the 31st October to the 8th November, and again from the 11th to the 19th without break, and so have really had only three days holidays this month instead of five, which we cannot afford to take. Under the section we have quoted the maximum period a factory can run is from a Friday to the following Tuesday week, inclusive or a period of *12* days; and such being the case, it seems absurd that we cannot run without intermission from Wednesday, 9th to Saturday, 19th, instant without intermission, the period being *11* days only.

We are, Dear Sir,
Yours faithfully,
GREAVES, COTTON & CO.

Appendix E.

Technical Education.

No. 3064 of 1904-05.

OFFICE OF THE DIRECTOR OF PUBLIC INSTRUCTION,
POONA, *2nd July* 1904.

To

THE SECRETARY,
MILLOWNERS' ASSOCIATION,
BOMBAY.

SIR,

I am directed by Government to inform you that it is proposed to recommend to the Government of India that two scholarships should be offered to suitable candidates in the Bombay Presidency with a view to the holders proceeding to Europe to pursue a special course of study in connection with the textile industry. It is also proposed that one of the scholarship holders should specially investigate the hand block printing industry and its methods with a view to the improvement and development of this minor industry in the Presidency and especially in Gujarat.

2. The value of the scholarships is to be £150 per annum, and it is further proposed that the holders should be granted a remission of fees in any institutions in Great Britain or other country of Europe which they might attend, and also receive reasonable travelling allowances for journeys made *bonâ fide* for the purpose of visiting industrial centres and particular institutions. The scholarships are probably to be for 2 years, that is to say that, if it appeared advisable to extend the scholarship at the end of one year, it might be so extended for a second year.

3. It is proposed that applications should be invited from candidates who have received a special education in the textile industry, such as that given in the Victoria Jubilee Technical Institute, Bombay, and who have subsequently had practical experience in a Mill for a period of 5 years. Candidates who have had a good general education such as University Graduates and who also have had the necessary practical training in a Mill for a similar period would also be invited to apply. It is thought that such candidates should not be more than 30 years of age, but Government reserve the power of relaxing the age limit. It is obvious that candidates must have a thorough acquaintance with English so that they may be able to profit by a course of study in Europe.

4. I am desired to ask that you will favour me with your opinion as to the course of study which should be followed by the scholarship holders during their absence from India. The course should be directed towards the acquisition of such special knowledge as will be most serviceable to them on their return to this Presidency. They may, presumably, on their return take up employment under a firm or company, or undertake industrial enterprise on their own account, or find suitable employment in such a special school as that proposed to be started in Ahmedabad by Mr. Chinubhai Madhavlal in connection with the textile industry. It is not, I understand, proposed to restrict them in any way in this direction or to place them under any engagement.

5. If you can assist me in framing the outline of a course of study calculated to render the scholarship holders especially competent and useful men in view of the present circumstances of India and especially of this Presidency, I shall be much obliged. I also request the favour of early consideration of this reference, so that my report to Government on the subject may be delayed as little as possible.

I have the honour to be,
Sir,
Your most obedient servant,
E. GILES,
Director of Public Instruction.

MILLOWNERS' ASSOCIATION,
BOMBAY, *9th July* 1904.

THE AGENTS, CENTURY MILLS,
" MORARJI GOCULDAS S. & W. Co.,
" CURRIMBHOY MILLS,
" MANECKJEE PETIT MANUFACTURING Co., LD.,
MESSRS. THACKERSEY MOOLJEE & Co.,
THE SUPERINTENDENT, MESSRS. E. D. SASSOON & Co.'s MILLS,
THE AGENTS, DAVID MILLS Co., LD.

DEAR SIRS,

Under the instructions of the Committee of the Bombay Millowners' Association, I beg to wait upon you with a copy of a communication received from the Director of Public Instruction, Bombay, and to say that the matter referred to is under the consideration of a Sub-Committee with a view to advising the Director on the points mentioned in his letter.

The members of the Sub-Committee would be pleased to have the views of your Manager or other Mill official on the subject, and they would esteem it a favour if you would allow him to attend a meeting at the Association's Rooms on Friday, the 15th instant, at 12 o'clock, for the purpose of discussing the matter with them.

I am, Dear Sirs,
Yours faithfully,
C. J. MICHAEL,
Assistant Secretary.

MILLOWNERS' ASSOCIATION,
BOMBAY, *1st August* 1904.

THE DIRECTOR OF PUBLIC INSTRUCTION, BOMBAY,
POONA.

SIR,

Under the instructions of the Committee of the Bombay Millowners' Association, I have the honour to acknowledge the receipt of your letter No. 3064 of the 2nd ultimo, on the subject of the proposal to recommend to the Government of India that two scholarships should be offered to suitable candidates in the Bombay Presidency with a view to the holders proceeding to Europe to pursue a special course of study in connection with the textile industry.

2. The object Government have in view in offering scholarships to suitable candidates is most praiseworthy, and the Committee, who heartily support the scheme, direct me to convey to Government their thanks for the opportunity given them of expressing their views as to the course of study to be pursued.

3. With regard to para. 4 of your letter the Committee consider it advisable for the present to confine the course to the following branches of the textile industry :—

(*a*) Chemistry in its application to textile requirements in general, but more especially in regard to the printing of textile fabrics, with the object of improving the hand methods at present in vogue in the villages and towns of the Bombay Presidency, and especially Gujarat.

(*b*) Weaving.

(*c*) Finishing and bleaching.

(*d*) Carding and spinning.

4. The study under "(*a*)" will, in the opinion of the Committee, prove to be a most valuable stimulus to the declining industry of hand block printing, as practised in this country, which is a method eminently suitable to the requirements and resources of the natives of India, and though machine printing has attained a high state of perfection in Europe and other Foreign countries, the Committee think it would be unwise to introduce it into India owing to the processes involved requiring very accurate manipulation, which will take a long time for native labour to master. In addition to this, a machine printing plant is very expensive, and would necessitate the starting of a new industry for the engraving of expensive copper rollers, an art which is confined to special districts in the United Kingdom and the Continent of Europe. On these grounds, the Committee do not favour the introduction of machine calico printing as an Indian industry. The Committee are, however, of opinion that a native student trained as a chemist in the manner referred to would be of great assistance to the hand block printers of this country, and would enable them to re-establish the position they formerly held for the production of printed fabrics, having colours of exceptional fastness and brilliancy and indirectly to conserve the production of vegetable dyes which threaten to become extinct.

5. The Committee would, therefore, suggest that Government should abandon the idea of sending a student to Europe for the special purpose of studying hand block printing, as it has practically become a disused Industry in Europe.

6. Touching the other points of your letter, the Committee desire to make the following remarks :—

Para. (2).—The Committee consider the value of the scholarships and other provisions proposed to be granted by Government to be satisfactory, but they think a two-years' course of study is not long enough for a student to acquire the necessary proficiency, and would therefore suggest it being extended to three years.

Para. (3).—The Committee consider it advisable that the scholarships should be conferred upon those who have had a special training of not less than 5 years, *i.e.*, either a full course of 3 years at a Technical Institute, and 2 years at some Textile Mill or Works, or 5 years in any Textile Mill or Works.

7. They are further of opinion that the student should, after having gained admittance to any Works or Mill, still continue his studies at the leading Technical Institute in the District, preferably, the Sir J. Whitworth's Technical Institute in Manchester.

8. The Committee would suggest, as a means of having some check upon the students' movements, that he should receive a weekly allowance, and that in no instance should a payment be made unless a certificate has been given by the Manager of the Mill or Works, and the Principal of the Institute, stating the number of hours the student has attended.

9. With regard to the question of the student getting admittance into the various works or Mills both in England and on the Continent, I am to state that the assistance of the India Office should be asked in this matter, and that H. M.'s Secretary of State be specially requested to do all that is possible for the student to get easy admittance into the most suitable Mills or Works.

I have the honour to be,
Sir,
Your most obedient servant,
C. J. MICHAEL,
Assistant Secretary.

Appendix F.

Factories Act.

SHUTTLE GUARDS.

FACTORY DEPARTMENT,
BOMBAY, *1st March* 1904.

No. $\frac{\text{F. I.}}{147}$ OF 1904.

FROM
THE CHIEF INSPECTOR OF FACTORIES,
BOMBAY.

To
THE SECRETARY,
MILLOWNERS' ASSOCIATION,
BOMBAY.

SIR,

With reference to your letter of 5th December 1903,* I have the honour to inform you that the shuttle guards in the mills mentioned by you have been inspected and reported on by an officer of this department.

2. It may be said generally that any of the guards now in use are effective if kept in proper order. In some cases, however, they can easily be rendered useless by being tied back or by springs being bent or displaced. For these reasons, and as being non-automatic in action, guards consisting of a hinged bar ordinarily kept in position by springs but moveable by hand are open to strong objection. Of the automatic guards the best are probably those of the type in use in the Century Mill supplied by Messrs. Platt Brothers, which are really self-acting.

3. No objection will be raised by this Department to the adoption of any of the types of guards which have been tried in the mills mentioned by you, but as the responsibility for their proper repair and use will necessarily be on the millowners it is strongly recommended that guards such as those referred to above, which are specially liable to get out of order or easily tampered with, should not be adopted.

4. It will, I think, be found that Managers in most cases prefer fixed guards.

5. Regarding these it may be pointed out that unnecessarily heavy bars have in some cases been used. It is only requisite that they should be sufficiently rigid to resist any attempt of the operative to bend them. Bars 5/16″ in thickness would be sufficient for spaces not exceeding 28 inches, but on wider looms bars of this dimension should be stayed in one or more places or replaced by thicker bars.

---

* See Association's Report for 1903, p. 66.

6. The first Inspector of Factories has suggested that they be made in sections 14″ in length and put on in numbers to extend the loom reed space. The bars should be 5/16″ in diameter and bent as shown in the attached sketch.

7. In all cases of guards the centre of the guard bar should be distant from the face of the reed cap bar by the width of the shuttle used and the bottom edge of the bar when in position not higher than the bottom edge of the above mentioned reed cap bar.

8. I would request that you would, when bringing this letter to the notice of the members of your Association, be so good as to ask that early steps be taken in providing their looms with guards.

9. Orders are being issued to Inspectors for the enforcement of these rules, but a reasonable time will, of course, be allowed in each case for the provision of the guards.

I have the honour to be,
Sir,
Your most obedient Servant,
J. R. MARTIN,
Chief Inspector of Factories, Bombay.

Appendix G.

Bombay's Railway Communications.

No. 2029 of 1904.

GOVERNMENT OF BOMBAY,
P. W. DEPARTMENT, RAILWAY BRANCH.
Poona, 13*th August* 1904.

FROM

MR. G. A. ANDERSON,
SECRETARY TO THE GOVERNMENT OF BOMBAY,

To

THE PRESIDENT,
MILLOWNERS' ASSOCIATION,
BOMBAY.

SIR,

I am directed to forward copies of the notes and correspondence noted in the margin, with a request that Government may be favoured as early as possible with any observations that the Millowners' Association may wish to make on any of the points raised, and especially with their opinions on the following questions (or such of them as concern their interests) which the Government in Council considers should be determined before dealing with detailed proposals for extension of Railway communication and facilities within the Island :—

(i) Letter No. 10171, dated June 8th, 1904, from the Agent, G. I. P. Ry. Co., to the Consulting Engineer for Railways, Bombay, and its accompaniment—G. I. P. Ry. Board's letter No. 40, dated May 13th, 1904.
(ii) Note, dated June 1st, 1904, by the Chief Engineer, Public Works Department, Bombay.
(iii) Note, dated July 2nd, 1904, by Consulting Engineer for Railways, Bombay, with two plans—Consulting Engineer's No. 5780-A and 5780-B.

(i) Whether it is practicable and expedient to have all goods imported for places outside the Island, or brought from such places for export by sea, dealt with on the Harbour side north of the Castle.

(ii) Whether goods brought for local consumption could be dealt with exclusively or generally at or in the vicinity of Grant Road Station, or, if not, where goods yards for such traffic would be most conveniently situated.

(iii) Whether through trains for passengers from and to distant stations should be run to and from Victoria Terminus, provision being made for carrying travellers by sea to and from the deep sea pier and possibly disconnecting at Dadar or elsewhere passengers for Grant Road or other stations on the west.

(iv) Whether, in the event of the previous questions being answered in the affirmative, the Bombay, Baroda and Central India Railway should stop at Church Gate or should be continued to Colaba for suburban traffic.

(v) Whether for carrying out such arrangements as are indicated, single control of the lines south of point of junction would be necessary or whether they could not be effected by co-operation of the two Railway Administrations.

(vi) Whether for suburban traffic there will be substantial need that each Railway Administration should have running powers over the line of the other up to points outside the Island, and, if so, to what points, and whether there would be practical difficulty in carrying out such an arrangement.

2. I am to add that, if it appears desirable, Government propose to appoint a Committee for the purpose of reporting on these questions after personal discussion and hearing of evidence.

I have the honour to be,
Sir,
Your most obedient Servant,
G. E. LILLIE,
Offg. Under-Secretary,
for Secretary to Government.

GREAT INDIAN PENINSULA RAILWAY COMPANY.

VICTORIA TERMINUS,
No. 10171. BOMBAY, *8th June* 1904.

To

THE CONSULTING ENGINEER FOR RAILWAYS,
BOMBAY.

SIR,

I have the honour to send you copy of the Board's letter No. 40, dated 13th May 1904, also of certain correspondence, as per list attached to it, which bears more or less on the subject of the same.

2. The Board have desired me to supplement their letter with such further information as is calculated to make the position clearer, and in doing so I will deal with the several points ranged in para. 8 of their letter.

HARBOUR BRANCH LINE.

3. The situation regarding this project is much the same as when I despatched my letter No. 11, dated 12th March 1904, to the Board, except that we have now ascertained the terms upon which the Port Trust are willing to let us have the land required for the main line of the branch for our new stores yard and landing basin, and for the re-arrangement of sidings and sheds in Wadi Bandar goods yard. We have not yet made a survey for starting the branch line directly out of Kurla station, instead of from a point on the main line on the Sion side of it, but we have sufficient data on which to pretty accurately base an estimate of its cost.

You will observe, however, that the Board have accepted the proposals of the Port Trust that the portion of the branch line to be constructed and owned by this Company shall end at Mazagon at a point which has been fixed, and that south of that point the branch will be nothing more than a dock siding to be constructed and owned by the Port Trust, also that no siding south of that point shall be used for passenger traffic.

RAILWAY EXTENSION TO A DEEP SEA PIER SITUATED NEAR THE SITE OF THE EXISTING BALLARD PIER.

4. I believe you will agree that such a pier being constructed, there is no possible room for doubt that it must be placed in direct railway connection with this company's main line outside Victoria Terminus, and that in view of the fact that the pier will be used, as the Board observe, for all ocean passenger, trooping and postal mail services, it would be short sighted policy not to now contemplate that such services will largely increase in the future, especially when Karachi and other north-western parts of India are united, *via* the B. B. & C. I. Railway, with this City, and to so deal with the matter now as to allow for railway and pier facilities to expand accordingly.

The Port Trust scheme is designed to admit of two vessels being alongside the pier at a time and I believe the Trustees realize that the accommodation may have to be increased. The latest plan that I have seen shows the new pier to be 300 ft. wide, with a large area extending westward to Ballard Pier reclaimed. In my opinion that reclaimed area will have to be utilized for sheds for military purposes, refreshment and waiting rooms, offices for the military, railway, postal, telegraph and customs departments, for bankers and agents, shops for out-fitters and book sellers, etc., for every convenience, in fact, that passengers arriving in or leaving the country can require. As the use of the pier expands, so, too, must railway facilities and as it is unlikely that any part of the pier, or reclaimed area, will be available for such purposes, except only so far as is required for work on the pier, the Board are doubtless correct in contemplating that this cannot be effected without encroaching on the compound of St. George's Hospital; in any case I believe that the conditions of the future will render that building absolutely untenable for the purpose that it is now used. It has to be realized, also, that the B. B. & C. I. Railway goods yards between Carnac Bunder and the hospital must continue to exist, and the facilities in it will in course of time have to be increased for goods purposes; further that if a satisfactory connection between the G. I. P. Railway and the deep sea pier is effected, it will eventually be necessary to re-arrange the sidings in that yard so as to place its shunting necks on the eastern side of the Hospital between it and Frere Road.

Such of the hospital buildings as need not be disturbed to make room for additional sidings, etc.—and as far as one can now see it seems possible that the main one may always be spared—can with advantage be used for railway purposes, for you are aware, I think, that although we have erected and are now extending an unsightly semi-temporary structure opposite the site that will be occupied by the new General Post Office, to make room for a portion of our Audit staff, the clerical rooms in the Administrative building are objectionably over crowded; moreover, the acquisition of the hospital would remove some of the disabilities that we now labour under in connection with the staff quarters.

I send diagram No. 15764 which suggests how a pier siding can, perhaps, best be laid.

FRERE ROAD OVERBRIDGE.

5. The necessity for this is unquestionable. Presumably it will be built on the alignment originally settled, *i.e.*, on a straight continuation of that portion of Frere Road which lies south of Wadi Bunder goods yard, but as none of the bridge, when built, will stand on railway land and only two openings in it will be required for railway purposes, it is reasonable to suppose that the allocation of the cost, accepted in 1892 by the three parties concerned, will be revised with the effect of reducing this Company's share.

6. It may be convenient if I now attempt to forecast what the liabilities of Government in the Railway Department may be if the schemes referred to in the Board's letter are carried out, and though, as you will understand, some of my estimates can be only roughly approximate, I think they may be regarded as indicating as nearly as is practicable without

complete investigation about what the total expenditure may amount to, as where in doubt I have estimated liberally :—

		Rs.	Rs.
(*a*)	HARBOUR BRANCH LINE, KURLA TO MAZGAON—		
	Estimate as submitted to the Board	28,69,000	
	Add for starting the branch from Kurla station...	1,00,000	
	Add for siding between branch line and Wadi Bunder for exchange of empty wagons ...	88,000	
	Add for possible increase in cost of land ...	2,30,000	
			32,87,000
(*b*)	RE-ARRANGEMENT OF WARI BUNDER GOODS YARD—		
	On the assumption that there will be an exchange of, and no debit for, land		9,20,000
(*c*)	LAYING OUT NEW STORES YARD—		
	On the assumption that there will be an exchange of land for both the yard and the siding approach to it, and no debit		3,46,000
(*d*)	FRERE ROAD OVERBRIDGE—		
	On the basis of original design and allocation		4,31,000
(*e*)	BRANCH FROM G. I. P. R. MAIN LINE TO DEEP SEA PIER—		
	Line and sidings	1,52,000	
	Land other than that in Carnac Goods Yard and Hospital compound, including compensation ...	3,78,000	
			5,30,000
(*f*)	ACQUISITION OF ST. GEORGE'S HOSPITAL—		
	Buildings	12,50,000	
	Land	17,00,000	
			29,50,000

Government are, I take it, practically committed to the expenditure involved by the first four items, therefore the estimated cost of giving effect to the Board's policy which is designed to secure for the city that which it will certainly require in the future, is confined to (*e*) and (*f*), aggregating, say, 35½ lakhs of rupees, an expenditure below that which will have to be incurred if the conditions of to-day are not taken advantage of.

I have the honour to be,
Sir,
Your most obedient Servant,
H. WENDEN,
Agent.

THE GREAT INDIAN PENINSULA RAILWAY COMPANY.

48, COPTHALL AVENUE, E.C.,
LONDON, 13*th May* 1904.

No. 40 of 1904.

SIR,

RAILWAY EXTENSION IN BOMBAY.

HARBOUR BRANCH LINE.

APPROACH TO THE NEW DEEP SEA PIER.

Board's letter No. 40 of 1901, whole letter.
Agent's letter No. 13 of 1903, paragraph 173.
" " " 11 of 1904, " 128.
" " " 13 " " 160.

The Special Commission appointed in 1899 under the Railway Act—with Sir Arthur Trevor as Chairman—decided that the proposed branch railway into Bombay to give better

access to the docks was necessary for the mercantile interests of Bombay; that when made it should form an integral part of the G. I. P. Railway, and be constructed and worked by that railway; and that a double track for passenger service should be built as far south as Ballard Pier—in fact, throughout the whole length proposed. The Commission also decided that the proposed Frere Road overbridge, across the G. I. P. Railway at Wari Bunder, would not then be required. This overbridge project had been for years under consideration; and, although costly, had been accepted by the Railway Company by the Port Trust and by the Municipality, all of whom would have had to pay a share. As, however, the Government of India never sanctioned the railway portion of it, the proposal has remained in abeyance.

2. You now report that, as far as the present circumstances permit, you have prepared the necessary plans and estimates of this branch, taking off from the main line at or near Kurla station and terminating—so far as the Great Indian Peninsula Railway is concerned—in Mazagon, at a point a little to the north of our present goods yard at Wari Bunder. You state that the present plans and estimates have been made in close communication with the Trustees of the Port of Bombay; and also that it has been found practically impossible to continue any passenger line further south than Mazagon. In other words the continuation of the line south of that point must be devoted to goods traffic only; it will be treated as a siding into the docks, and as such it will be most conveniently constructed and managed by the Port Trust.

3. This alteration of design and the decision of the Port Trustees to construct a new dock to the south of those at present existing, and also to build a deep sea pier at which ocean steamers can lie at all times of the tide, have so materially altered the position of affairs since Sir Arthur Trevor's Commission reported that the Board consider it absolutely necessary to review their position, and to see in what manner the proposals must be changed so that the railway service shall be adequate to meet the certain wants of the city of Bombay when the works are completed. It is true that the new dock may not be finished and in working order for the next 8 or 10 years; but the deep sea pier will probably be ready within the next 5 years; it is consequently the duty of the Railway Company to have their part of the necessary accessory works ready within that time. With all this in view the Board instructed their Managing Director, on his recent visit to India, to go most carefully into the question of the railway requirements in Bombay in this connection, and they are now in possession of all the material facts.

4. The practicability of running a double line for passenger traffic east of the Frere Road down to the Ballard Pier does not appear to have been considered by Sir A. Trevor's Commission, but in preparing the plans for the Harbour Branch railway it soon became apparent that there was no space between the Frere Road and the docks for a passenger line of railway; in fact, a line of railway south of Wari Bunder and east of the Frere Road could only run *through* the docks, and would so hamper the working of the dock sidings to the different jetties and sheds as to practically paralyse it. The construction of the new docks will intensify this difficulty. This is pointed out in the letter received by you from the Port Trustees, No. 6120, dated 18th December 1902, and their objections to any passenger line through the docks are stated as follows:—

> *Para. 3.*—"The Trustees, I am to say, are definitely of opinion that there are "serious objections to the proposed separate passenger line south of Wari Bunder, "and consider a regular passenger service on this portion of the line unnecessary. "It would, in their opinion, be very prejudicial to the goods service and an entirely "useless expense, besides being a most serious hindrance to ordinary cart traffic. "The main goods line could be cleared for the mail arrivals and departures if found "desirable and not inconvenient, and there are other possible alternatives, but the "Trustees wish it to be understood that as now advised they cannot approve of "provision being made for a regular passenger service on this length. The conveni- "ence of the public visiting the docks will, they believe, be sufficiently met by the "proposed Electric Tramway service."

And they go on to remark that—

Para. 6.—"They understand your estimates will include the cost of the "main line up to the Mazagon depôt," and—

Para. 7.—"They understand also that you undertake complete financial responsibility for this portion of the undertaking," and

Para. 8.—"They propose accordingly to obtain sanction to estimates for the "section of the main line south of Mazagon to be financed by them. These will "embrace the acquisition of properties on the section through Mazagon and the "complete system of delivery sidings at the Mazagon depôt as well as the sidings "within the dock limits."

5. Considering that the proposed Mazagon depôt will be situated within a very short distance to the north of the docks, it is clear from the above that the desire of the Port Trustees is to stop the Harbour Branch line for all G. I. P. Railway purposes at Mazagon, and that the only connection southwards should be by sidings for goods purposes only into the docks ; and you, in submitting the plans and estimates for the Branch line, have practically accepted this proposal. Under this arrangement the G. I. P. Railway will practically have two terminal goods depôts in Bombay—one being the present one at Wari Bunder, where much of the local traffic will be handled, and the other at Mazagon which will be mainly devoted to goods traffic passing through the docks. The passenger traffic will not be affected by the Branch line, as both long distance and suburban traffic will continue to use the Victoria Terminus ; but as no passenger service is feasible through the docks, it is necessary to arrange that a proper access from the Victoria Terminus yard to the deep sea pier be constructed and worked by the G. I. P. Railway. Such a line is quite feasible, and the Board understand that the Port Trustees are in full accord with such an arrangement, as it will allow them to carry on the service in the docks without constant interference ; and it will also secure the necessary and independent railway access to the deep sea pier, a provision which will be required long before the new dock is expected to be ready. This new pier will certainly be used from the very outset for the embarkation and debarkation of all ocean passenger traffic, and will also, no doubt, be used wholly by the Military Department for troop traffic. A proper and effective railway connection with the pier is therefore obviously necessary ; and the connection should be of a permanent character as that traffic must increase rapidly.

6. Any such connection can only be made by passing through the compound of the St. George's Hospital. As a temporary measure a line with very sharp curves is feasible, without interfering with the main building, though several out-buildings would be cut off ; but a proper and permanent connection is only possible by the removal of the hospital to another site. Further, a new dock will certainly require more railway goods accommodation and sidings, and the hospital compound is the only position where such accommodation can be provided. The site of the hospital has never been a good one for that purpose, in fact it would be difficult to find a worse ; and when the dock is built, its position will be even more objectionable as it will be exactly between a noisy railway terminus and a large and busy dock.

7. The Commission recommended that that part of the G. I P. Railway yard at Wari Bunder, east of the Frere Road, should be handed over to the Port Trust, an equivalent of land and accessories being given to the Railway by the Port Trust elsewhere. By doing this the Commission thought that the present Frere Road could remain intact and that no overbridge would be required. But on further investigation this is impossible without causing even greater congestion of traffic along this main artery than at present exists. The new railway scheme must provide for a line of rails from the new branch into the present sidings at Wari Bunder for the due delivery and return of empty wagons ; the Port Trust will require a line to the sea front now to be given over to them ; the present connections between the G. I. P. goods yard and the dock must remain ; and the present tramway along the Frere Road will

soon be worked by electric power and will certainly be extended by the Municipality through Mazagon when the Wari Bunder yard is slewed round. It is therefore quite clear that all these connections and lines cannot be maintained at the present level of the Frere Road; consequently the overbridge project is an absolute necessity, and the Board agree that it should be carried out without delay. The Port Trust approach from the south is all arranged for; the land for the northern approach has been acquired by the Municipality, and it is understood that they are still very anxious to have the overbridge built; and the Railway will now have to arrange for the middle portion. This part should not be quite so expensive as in the original proposal, as the lines to be crossed will be fewer.

It may also be remarked that the tramway service through Mazagon must pass within a few yards of the proposed G. I. P. Railway terminus at Mazagon, so the few suburban passengers, to whom the branch line will be a convenience, will be able to reach with ease and comfort any part of the business centres of Bombay.

8. To summarize the above, the Board accept the argument that—

(*a*) a railway passenger service over the branch line south of Mazagon is not feasible, and that, threfore, it will be better to stop that branch, so far as the G. I. P. Railway is concerned, at that point, and permit the Port Trust to extend the line south as a siding into their docks;

(*b*) the construction of a deep sea pier renders it absolutely necessary that a proper and efficient permanent railway connection between the Victoria terminus yard and the pier should be provided without delay;

(*c*) the connection mentioned above (*b*) cannot be properly constructed without removing the European General Hospital to another site; and that

(*d*) the Frere Road overbridge must also be built.

That these works will be costly cannot be gainsaid, but the Board believe in the future progress of Bombay, and are confident that if they are not taken in hand at the present time, the expansion of business and trade in Bombay will force them to be undertaken later on and at greatly increased cost.

9. It may be argued that with the works contemplated by the Port Trustees at Mazagon, where the cotton and grain traffic are to be handled before going into the city or into the docks, more railway sidings and appliances will not be required at Carnac bunder, but it must be remembered that our present goods yard at Wari Bunder will be somewhat curtailed by the proposed transfer of land to and from the Port Trust, and all experience shews that when additional dock accommodation is provided, extra railway accommodation close by must follow; and as no other site is possible, the compound of the hospital is the only place which can be made available for that purpose.

10. Further it may be remarked that the Board are well aware that the new Harbour Branch into Bombay will not be very remunerative, notwithstanding the large goods traffic that will eventually pass over it, as the cost of working these terminal facilities will certainly not be less than 75 or 80 per cent. of the gross earnings; but owing to the peculiar formation of the promontory on which the city of Bombay stands the construction of this branch affords the only way in which the increasing trade of Bombay can be successfully dealt with, and the Board have consequently had to accept these costly arrangements. After the acquisition of the hospital site it will probably not be necessary to pull down the buildings for some time; they will certainly be allowed to stand until a new hospital has been provided, and may possibly be used as railway staff quarters and afford some temporary relief in that direction, as the housing of our staff at Victoria terminus and Wari Bunder is, as you well know, a most difficult and anxious problem.

11. You will be good enough to place this letter before Government without delay, supplementing it with such further information and details as you may think will make the position clearer; and ask that the matter may be considered at an early date, as the Board feel certain that any delay now will only increase the cost. The question of the removal of the hospital is one in which the Government of Bombay is of course largely interested, and the Board trust that they will look upon the matter in the same light as the Board have done. It is understood that the present hospital has cost about 12 or 14 lakhs of rupees, exclusive of land, but of course the Railway capital account will have to provide another equally efficient hospital elsewhere. This would doubtless be built on a more compact and commodious plan, and could probably be constructed at a cost of about 10 lakhs of rupees; but it will take (say) three years to build, so if anything can be arranged in this matter there is no time to be lost in carrying it out.

I am, Sir,
Your obedient Servant,
J. I. BERRY,
Secretary.

NOTE BY THE CHIEF ENGINEER, PUBLIC WORKS DEPARTMENT.

I am asked to explain more fully my ideas on the question of land requirements for Railways in Bombay, and I can best do so by giving my ideas on the entire question of Railway location in Bombay.

In my opinion the narrow island of Bombay is getting dangerously congested from both sanitary and commercial points of view, and I think unless Government at once look forward and lay down some definite lines on which further extensions of Railways, Tramways, Mills, Workmen's houses, etc., should be permitted, there is great liability of mistakes being done that will be very costly to remedy in the future. The time is past when individual cases can be settled without referring to some general plan, and, therefore, some defined policy is necessary in dealing with giving up land and permitting structural extensions as well as other buildings or sidings. So far as Railways are concerned, it would appear advisable that as far as possible Railway Stores, Workshops, Quarters for Staff, Police, etc., should be out of Bombay, say, north of Parel or Dadar; and that for any buildings that may be necessary in Bombay itself, care should be taken to conserve space as much as possible and build more than single storied erections.

Coming to the larger question of the future arrangements for Railway facilities in Bombay, it would appear the time must come, if it has not already arrived, when all questions of competition between the two Bombay Railways should cease so far as working within Bombay City limits is concerned: and *one control* for the working of both lines south of point of junction established with one Central Terminal Passenger Station and separate Goods Depôts; for trade for local consumption, and for export and import; with such arrangements as may be necessary for small stations to meet local and suburban *passenger* traffic.

The Victoria Terminus with easy and efficient connection with the new Docks naturally would be the Central Terminal Station of Bombay for all distant traffic and all Mail and Mixed or long distance passenger trains from both Bombay, Baroda and Great Indian Peninsula Railways might arrive and depart from there. The foreign export and import Goods Depôt for both Railways must naturally be near the Docks, and all goods for "foreign" should, if *possible*, go direct into the Docks and alongside Steamers: but if such an out of date and "tax on trade" institution as a cotton green or goods mart where goods must break bulk and be burdened with cost of a transhipment be still necessary, there is no doubt that the existing site of the "Colaba Cotton Green" is not the proper place, and that it should be located somewhere between the point where the two Railways join (Dadar) and the Docks, and such a site has already, I believe, been selected by the Port Trust in their new Dock Scheme. All inward goods for *local consumption* and local goods for up-country despatch of *both Railways* should be kept away from the Docks and not hamper the latter's legitimate work by blocking up space, and might be worked from a separate Goods Depôt which possibly might well be fixed at Grant

Road by taking up a good large tract of land extending from Grant Road north as far as Mahaluxmi Station, or further if necessary. This site would be well situated for local trade, being near the Mills and City and yet well away from the Docks and shipping.

If local and foreign goods trade can be separately arranged for and a Central Terminus for up-country passenger traffic fixed, we have only the local passenger traffic to deal with, but this is a large traffic already and must be expected to increase in the future. The best way to deal with it in the case of the Bombay, Baroda and Central India Railway might be to adapt the line for electric working for local traffic from say, Bandra to Church Gate, and establish a service every 10 minutes or such time as may be necessary. This service, in my opinion, need not go beyond Church Gate Street Station, and I therefore think the Bombay, Baroda and Central India Railway should *end there* and their line and sidings, station, etc., at Colaba all be given up.

The narrow strip of Colaba, populated principally with Military, cannot demand or justify a big terminal station at Colaba, while the Cotton Green as a goods Terminus is entirely out of date and now a ridiculous arrangement—when export cotton is carried 2 or 3 miles beyond its immediate destination to be unloaded, reloaded up in country carts and carried back to the Docks through some of the principal streets of the City. When the Cotton Green was established there was good reason for it. Cotton was but little full-pressed up-country and used to come to Bombay in 1/2 and 3/4 pressed bales, and a number of full presses were erected at Colaba and warehouses built: and the cotton was received, sampled and full-pressed there and immediately loaded into lighters from the Basins on the harbour side for shipment into vessels lying in the Stream. All this is now a thing of the past, and even if some Full Presses and Warehouses remain at Colaba, the sooner the first are removed and the latter turned into residential quarters the better.

The above gives briefly my general ideas, and I am sure some arrangements on the lines I have suggested are *possible*, if the whole matter be treated in a large-minded and liberal way. I further think that the arrangements could be carried out, not only without loss but rather gain to the two Railways concerned. A great deal of detail would require working out and many conservative ideas and almost vested customs broken through but all, I believe, to be within the range of practical politics if approached in the proper spirit. I have not attempted to enter on the question of the Great Indian Peninsula suburban traffic, as probably it can all be arranged for at the Victoria Terminus and without very great extension beyond perhaps some extra sidings and platforms.

Coming now to the immediate matter of this case, the grant of some land in the old Gun Carriage Factory at Colaba to the Bombay, Baroda and Central India Railway, I think the land may be given for *temporary* use. The Bombay, Baroda and Central India Railway have rightly or wrongly established a depôt of their stores here and land all their coal and English stores here, and until they can get some other place it is necessary to allow them to continue their depôt and give all necessary facilities for it. With the advent of the New Docks, I think the two Railways should have space in them allotted for their stores and coal landing, but till this comes other arrangements must continue and can do so: but I think all land should be given up on *temporary* tenure and on the promise that erections on it should all be of a description easy of removal.

If my idea of the Bombay, Baroda and Central India giving up the Colaba Station and ending their passenger traffic at Church Gate should by any chance come to early fruition, a single line of rails might as a temporary measure still be left running from Church Gate Street Station to Colaba *Gun Carriage Yard* to be used at night for Railway store purposes only. This line could be kept well away by the sea-face and a level-crossing given where the present Wodehouse Bridge stands, the latter being demolished with its approach banks to give level open spaces for building sites.

W. H. WHITE,
Chief Engineer, Public Works Department.

1st June 1904.

NOTE BY THE CONSULTING ENGINEER FOR RAILWAYS, BOMBAY.

Two sets of proposals are before me in connection with the development and reorganization of Railways in the Bombay island. The first emanates from the Great Indian Peninsula Railway Board and amounts to the acceptance by them of the necessity for an overbridge to take the Frere Road over Wadi Bunder yard, and to the addition to the Harbour Line scheme of a railway connection between the new Deep Sea pier about to be built by the Port Trust and the existing main line.

The second set of proposals comes from the Secretary, Public Works Department, Bombay. It deals with both the Great Indian Peninsula and Bombay, Baroda and Central India Railways and makes suggestions for a radical reorganization of the arrangement of both Railways in the island, principally it seems with a view to remedy as much as possible the present congestion in the island and to avoid further congestion in the future.

2. The two sets of proposals being largely inter-dependent should be considered together and now when important improvements in the Docks and their railway connections are about to be commenced is obviously the proper time for reviewing the whole railway situation in Bombay and endeavouring to arrive at the real needs of the trade and the public, with a view to forming an opinion as to how far the altered conditions brought about by the new Harbour Line and the enlargement of the Docks demand or will allow of improvements in the existing railway facilities and as to the shape the alterations should take in order to meet public requirements.

Taking first the concrete proposals of the Great Indian Peninsula Railway.

3. **The Harbour Line.**—All the main points at issue between the Port Trust and the Railway Company have now been settled and the necessary exchange of lands is under negotiation, in regard to which no difficulties are anticipated. The general scheme has received the approval of the Commission appointed in 1899 by the Government of India to investigate it on the spot and as soon as the final estimate is received and sanctioned by the Government of India the necessary funds for the construction of the line will be entered in the Railway budget. The only point to which it seems necessary to draw special attention is the fact that all rail-borne passenger traffic is to stop at the Mazgaon (or Tank Bunder) Transfer Sidings.

4. **Extension of the passenger line from the Great Indian Peninsula Railway existing main line to the new Deep Sea pier.**—(I). There can, I think, be no two opinions regarding the necessity for placing the new Deep Sea pier in direct railway communication. The pier and the reclamation of the large area behind it are about to be commenced and are expected to be ready for use within the next four years. Whatever the opinions as to the extent to which it will be used for direct embarkation from trains or for direct entraining from ships, and the areas required at the pier or elsewhere for the passenger service necessary, it is certain that it will be used to some—and in my own opinion a rapidly increasing extent—by ordinary sea-going passengers, while for purposes of military transport its convenience is so obvious that its fullest use for that purpose may safely be predicted.

(II). And the correctness of the opinion expressed long ago by the Port Trust regarding the serious objections to the conduct of a regular passenger service over the Trust portion of the new Harbour Line will also, I think, not be questioned. The G. I. P. R. having now accepted this view, it only remains to provide passenger access to the Deep Sea pier by the best route independent of the Harbour Line that can be found. This must necessarily take off from the G. I. P. main line and a glance at the map will show that the take off must be at some point south of the Carnac Bridge. North of this point therefore no investigation is required.

(III). The following are the main questions affecting the desired connection that require to be investigated :—

(*a*) Is any additional *goods accommodation* required at either Victoria Terminus or Carnac Bunder in consequence of the enlargement of the Docks?

(*b*) What additional accommodation west of Frere Road is likely to be required *for passenger traffic only*, in connection with the railway branch to the Deep Sea pier?

(*c*) What alternatives to the alignments proposed by the Great Indian Peninsula Railway are *primâ facie* feasible, and which of these must be rejected on practical considerations?

(*d*) What are the comparative merits of the alignments left open for discussion, and how do they compare in cost?

(IV). *Question* (*a*). The G. I. P. R. Board represent that with the advent of the Harbour Line their railway will have practically two terminal goods depôts in Bombay—instead of one as at present—*viz.*, Wari Bunder for local goods and Mazagon for goods passing through the Docks. The passenger traffic however they note will not be affected (*i.e.*, either increased or relieved) by the Harbour Line, and no passenger service being feasible through the Docks, they consider it necessary to arrange for one to the Deep Sea pier by a branch line worked by the G. I. P., leaving the Victoria Terminus yard and passing through the compound of St. George's Hospital. So far this statement may be accepted with a reservation for the present regarding the alignment of the branch.

(V). But in paragraph 9 the Board suggest that in spite of the relief afforded to existing railway goods depôts by the handling of cotton and grain at the Mazagon yard of the Harbour Line, additional goods accommodation will be required in the railway yard west of the Frere Road, and they state that the compound of the hospital is the only place that can be made available for the purpose.

The reasons given for this opinion are that—

(*a*) All experience shows that when additional Dock accommodation is provided, extra railway accommodation close by must follow.

(*b*) The present goods yard at Wari Bunder will be somewhat curtailed by the proposed transfer of land to and from the Port Trust.

The inference is that some compensating area in Victoria Terminus yard close to the Docks is therefore necessary.

(VI). Now as more than once pointed out in the evidence before the Harbour Line Commission, the projecting of that railway was an essential work in connection with the extension of the Docks. The Railway in fact was to be the complement of that extension; providing "*close by*" the extra railway accommodation—with room for expansion—that the Docks and their extensions would require. At Mazagon over 700,000 square yards are to be made available for dealing with the traffic by the Harbour Line, and after deducting the 161,000 yards occupied by the Cotton Green at Colaba and required for the same purpose at Tank Bunder, and the space at present occupied by the cotton sidings at Colaba, some 450,000 square yards (or about 93 acres) of purely additional goods accommodation in close and direct connection with the Docks will be provided, and the G. I. P. estimate that the main line stations will be relieved by diversion to the Harbour Line to the following extent:—

Grain seeds and Myrabolams	... 50 per cent.
Gunnies	... „
Piece-goods	... „
Metals	... „
Railway materials ...	... All.
Kerosine oil	... 66 per cent.
Coal	... All.
Manganese ore	... „
Sundries	... 10 per cent.
Cotton	... 66 „

A total relief approximating to about 50 per cent. of the entire Bombay traffic and the B. B. & C. I. Railway must necessarily be relieved to a considerable extent, though, on account of cotton and railway material being dealt with at Colaba, the relief at Carnac Bridge will probably be less than at Victoria Terminus and Wari Bunder.

(VII). As to the present goods yard at Wadi Bunder being curtailed by the land exchange to be made with the Port Trust, the greater part of the land given up by the G. I. P. to the east of the Frere Road at Wadi Bunder forms their railway storeyard, and is not available for public traffic. In exchange for this they are to receive 127,500 square yards above Tank Bunder. The part of Wadi Bunder east of Frere Road used for public traffic measures about 32,000 square yards, whereas the land to be received from the Port Trust for addition to the existing public traffic yard west of the Frere Road measures 76,578 square yards, to which, in accordance with the recommendation of the Land Committee of 1903, it is proposed to add another area, measuring some 30,000 square yards, for the widening of the entrance to the yard. Not only therefore is the Wari Bunder yard increased in area instead of curtailed, but the additional land to be added to the yard is so situated as to allow a fuller use being made of the new yard than is possible in the existing one.

(VIII). Further, the acquisition of an area of about 96,000 square yards at Byculla, of which some 78,000 square yards will be utilised for a goods depôt, has just been sanctioned by the Government of India; so that while the goods traffic at the main line stations is likely to be reduced by about one-half, the accommodation for it will be very considerably increased, and it would therefore seem that full provision has been made for the extra railway goods accommodation necessitated by the Dock extensions, and that any trade necessity for increasing such accommodation, in the Victoria Terminus yard is not apparent. If when the Docks and Harbour Line are completed, further railway goods accommodation should be found necessary, the anticipated diversion of so large a proportion of the traffic of both Railways to the Dock line and the progressive development of the country to the east of that line, which will be referred to in the sequel, would seem to point to that accommodation being required on the Harbour Railway rather than on the existing main lines.

(IX) *Question* (*b*). As to how much additional accommodation west of Frere Road will be necessary in connection with a purely passenger branch to the Deep Sea pier, I can only repeat the opinion I have already expressed at the meetings of the Docks Committee of the Port Trust in March last, *viz.*, that it is not possible to foresee now what space future railway development may require, and that the Ballard pier reclamation—the obvious site for dealing as completely as possible with the passenger traffic at the Deep Sea pier—should be left entirely unhypothecated until all concerned are in a better position to judge of the space that will be required for railway terminal facilities there. Railway Managers, who are in the best position to speak on the point, find that under present-day conditions the heaviest trains for homeward-bound steamers are not on the day of the outgoing mail but on the day or two preceding its departure, the accepted explanation being that the majority of passengers prefer to have at least one day in Bombay in which to transact business with their Agents, &c., &c., and for presumably similar reasons a large percentage of the arrivals from Europe do not proceed at once to their destination upcountry. The want of proper terminal facilities however must, in my opinion, be an important factor in the present disinclination for direct travel to and from ocean steamers; when every convenience is provided it is difficult to believe that large numbers will not prefer to travel straight between steamer and rail, and the Military will certainly wish to make the fullest possible use of the means offered for direct transport. The present area of the Ballard pier reclamation that could be made available for a passenger terminal with its attendant conveniences is about 200,000 square yards, a space nearly equal to the area of the present Carnac Bridge goods yard and to the entire Victoria Terminus yard—goods and passenger—and about three times as large as the St. George's Hospital compound, and if judiciously laid out this area should it seems be ample for all terminal passenger requirements, provided space can be found in the present railway yards west

of Frere Road for the stabling of spare stock, cleaning, watering, &c., of coaches in connection with the terminal service. No very considerable space should be required for these purposes, and it is better not to encumber the valuable pier site with such arrangements if it can be avoided.

(X). The precise arrangements for passenger traffic which, in view of the reclamation area possibly not being available for the purpose, the Agent contemplates making on St. George's Hospital site in addition to the goods traffic facilities which the Board by their paragraph 9 seem to consider should be dealt with on this ground, are not detailed in his letter, but I conclude that he intends them to comprise only services of the nature I have just named. In my opinion no arrangements west of the Frere Road on a site about one-third the size of the Ballard pier reclamation, and separated from the pier terminal by valuable Port Trust property and a busy thoroughfare, necessitating the minimum possible of connecting lines and shunting, can be regarded as an adequate substitute for self-contained terminal facilities at the pier or as any other than merely supplementary to complete arrangements there, and, as I have said, it is I think indispensable that the pier reclamation should be reserved exclusively for railway terminal purposes and connected uses until actual experience shall show how much of the area may be otherwise employed. To the best of my belief this is the intention of the Port Trust, and I have no reason to think that there will be any difficulty in making suitable arrangements.

(XI) *Question* (*c*). So far then the conclusion arrived at is that there is no apparent necessity for increasing the accommodation for goods traffic in the Victoria Terminus yard in consequence of the Dock extension, but that some slight additions for passenger traffic in connection with the pier terminal may possibly be necessary west of the Frere Road, *i.e.*, either in the Victoria Terminus yard or in the adjacent Carnac Bridge goods yard of the B. B. & C. I. The next point to consider therefore before discussing alignments alternative to those proposed by the Agent of the G. I. P., is whether any portion of the goods yards of either railway can be given up to supplement the pier terminal passenger arrangements. I will first take the B. B. & C. I. yard. It is some three times larger than the G. I. P. goods yard, and in other respects is very similarly situated. Both yards are suitably placed for the trade close by the new Docks, both serve a considerable traffic long accustomed to the locality, and both will experience relief when the Harbour Line is in working order—the B. B. & C. I. yard however probably in less degree than the G. I. P. yard. If either is to be abandoned therefore or can be curtailed, it would seem that the larger should be the one to be operated on. It has before now been suggested that on the completion of the Harbour Line, Carnac Bridge might be abandoned as a goods yard, and I have given the suggestion particular consideration in connection with the present reference. A very large traffic both inwards and outwards is done at this yard and even after deducting over 40 per cent. on account of staples that are to be diverted to the Harbour Line, I find some 80,000 tons were dealt with here during the first half of 1903. The yard moreover is so favourably situated for some trades—notably hardware and piece-goods—that merchants are willing to bear an additional charge of one anna per maund on long up country despatches from Carnac Bridge. It may be argued that if trades so considerable as cotton and grain can move miles away to a new centre, it is reasonable to expect that lesser trades will follow their example, but the inducement offered must be something more tangible than motives of pure philanthropy. Cotton and grain are moving to Mazgaon under the inducement of a considerable prospective saving in freight charges; it seems more than doubtful if a move of Carnac Bridge traffic to Wadi Bunder or Byculla would have any effect save to *increase* freight charges, but it is hardly necessary to wait for certain information on this point, for it will at any rate be conceded that to altogether displace a goods yard from a position which past experience has shown to be most suitable to certain trades at the precise time that its convenience for all is to be increased by the construction of an extensive Dock alongside of it, is a step which could only be justified by overwhelming considerations of public interest, or by benefits to the trade in general unmistakably out-balancing present advantages to any particular callings.

(XII). With these prefatory remarks I will first discuss the only alternative alignment to the north of St. George's Hospital which appears to me to have any *primâ facie* claim to consideration. I will call it the Carnac Bridge route: it is shown on Consulting Engineer's plan No. 5780—A, together with the two alignments proposed by the G. I. P.; the two latter are in red, the northern alternative is in heavy black line-and-dot and may be described as follows.—

Leaving the G. I. P. main line at about 300 feet south of the Carnac Bridge it runs in a practically straight line to the extreme north-east of St. George's Hospital compound, thus cutting the parallelogram of Carnac Bridge goods yard into two approximately right-angled triangles. It merely touches the corner of the Hospital compound, and crossing the Frere Road on the skew it traverses diagonally Alibag, Bankote, Chiploon, Rajapoor and Malwan streets and the 4 Port Trust blocks between them, and then goes through the Shell Company's Bulk Oil Installation, and may reach the pier head either by the Agent's alternative alignment or by the line marked in blue.

(XIII). The apparent advantages of this route may be stated as follows:—

(*a*) It has easy curvature.

(*b*) It traverses only the extreme corner of the Hospital compound for 150 feet and this should cause so little inconvenience to that establishment that the encroachment could hardly constitute a claim for its acquisition.

(*c*) It allows of the Carnac Bridge yard being utilized in whole or in part, for supplementary arrangements to the passenger terminal, the whole being available for that purpose if the yard is to be abandoned and the south-west half giving what should be a sufficient area for the purpose if the other half is to be retained as a local goods yard. The Carnac Bridge yard, it should be remembered, will, long before the connection with the pier is required, be the property of Government, who will therefore be in a position to distribute it as they please.

The impracticability of this route will be realized when we come to consider the chronological order in which the various works in connection with the Docks and Harbour Line are likely to be undertaken. Meanwhile I may point out that the advantage claimed for it under (*c*) above is more than questionable. If Carnac Bridge yard can be entirely abandoned, the division made by the proposed alignment—or any other that would spare the Hospital—cuts up a large and well-shaped space into two comparatively futile plots and renders the laying out of any alternative arrangements on the site difficult and unsatisfactory; while if it is decided that the north-east portion is sufficient in area for a local goods yard, the shape and lie of this portion with regard to the main line are such as to render local goods work practically unworkable for any but an amount of traffic so inconsiderable as not to justify the retention of a separate yard at all. A further disadvantage is that the route passes through a maximum amount of Port Trust property east of the Frere Road and—putting aside the question of the consequent enhanced cost to the Railway—thereby proportionately reduces the earning power of the Port Trust. It also cuts across no less than 6 roads connecting Frere Road with the Docks.

(XIV). I believe I am correct in assuming it probable that the reclamation works at the Mazgaon Transfer sidings, Railway store yard, and Cotton Green on the Harbour Line will not, for financial and other practical reasons, be commenced within the next 4 years or so, *i.e.*, until after all the Dock dams and pier works are completed. That the new G. I. P. store-yard with its approaches and the entire space to be covered by the grain, transfer, and cotton sidings must be the first to be taken in hand seems obvious since the Railway Company cannot move out of their Frere basin at Wadi Bunder until they get a yard elsewhere, and similarly grain and cotton cannot move to their new quarters until lines and general accommodation are ready

there for handling them. From a consideration of the "quantities" in these reclamations and the means and plant at the disposal of the Port Trust, I do not think I can be far wrong in estimating that two years may be allowed for these works and two years more for the Cotton Green to be made ready, and there is plenty of evidence attached to the report of the Harbour Line Commission to show that there is considerable doubt regarding the simultaneous wholesale move of cotton from Colaba even when the new arrangements at Tank Bunder are ready for its reception. I think therefore it is safe to estimate that it will be 9 or possibly even 10 years before cotton moves *en bloc* from Colaba and 7 years at least before full relief is given to the main line stations of the G. I. P. and B. B. & C. I. Railways in respect of their grain and principal staples which it is intended should he dealt with on the Harbour Line; for it must be borne in mind that the trade cannot be compelled to move to Tank Bunder, in recognition of which fact and of the possibly considerable time that may elapse before the entire move is effected, it has been decided only to give shed and other accommodation at the Transfer sidings tentatively and as called for by the trade.

(XV). Meanwhile however the completion of the Deep Sea pier and reclamation ready for full use may be reckoned on *within the next 4 years*, and the alternative alignment as I have suggested is therefore impracticable for the simple reason that even were it decided to abandon or curtail the Carnac Bridge yard, it certainly cannot be touched until it is relieved by the Harbour Line, and during the 3 years or more that this relief is awaited, it is equally certain that the pier cannot be left without railway connection. Nor will this alignment serve as a means of gaining temporary access to the pier, for, apart from the great cost of the overhead railway that would be required in order not to disturb the traffic of the yard, the requisite headway is not obtainable.

And it is important that whatever means of access may be adopted temporarily should fall in with the final and permanent arrangements decided on at the pier and reclamation, and at any rate approximately if not actually coincide with the ultimate final alignment through Port Trust property; otherwise the expense and inconvenience of re-arrangement at the Terminus and of acquisition of Port Trust works and re-construction of the connection are likely to out-balance all economies in first cost. The Carnac Bridge route must therefore be rejected. It is impracticable for obtaining temporary access to the pier, it would entail considerable additional expense if resorted to at some later period—temporary access by some other route being given meanwhile—and if resorted to finally under these adverse conditions it has no advantage to offer to the public in exchange for the complete ruin of a most useful goods yard.

(XVI). On the same plan—Consulting Engineer's No. 5780-A—I have repeated the two alignments proposed by the Agent and added in blue line a suggested alternative. I will first take the Agent's red line route which I have marked No. 1. It will be seen that this line cuts the extreme south-west angle of the Hospital property, and that were it not for the sidings which he places in the compound here and the necessity for shifting the B. B. & C. I. shunting neck to the east of the Hospital (as shown in yellow lines) occasioned by its present position being crossed by the proposed G. I. P. alignment, the access of nuisance caused by the addition of a running line on the alignment proposed could hardly be considered sufficient to compel acquisition of the entire Hospital property, since the additional line is no nearer to the main buildings than is the B. B. & C. I. neck on which all the shunting connected with their Carnac Bridge goods yard is done, and not so near to the Hospital establishment quarters as this shunting neck which though it runs within a few feet of these buildings has yet been suffered for years by the inmates. But in addition to a disablement of the Hospital premises by the shifting of the B. B. & C. I. shunting neck out of all proportion to the advantage obtained for the branch alignment by the frontal encroachment on the property, this alignment has other drawbacks. It traverses for some 200 feet the new road just constructed in front of the General Post Office site lately acquired and it divides the pier reclamation in a manner which appears to be wasteful of the capacity of that area. These drawbacks are 1

think absent from the blue line alignment which I have suggested and which it seems to me can *prima facie* lay claim to the following advantages :—

(*a*) It obviates the necessity for shifting the B. B. & C. I. shunting neck to the back of the Hospital and beyond crossing the approach road to that establishment just as both the Agent's alignments do, puts it to no more inconvenience than at present exists and has existed for years.

(*b*) By taking up Malwan street and the northern half of the Port Trust block between that street and Vingoorla street, two or more sidings 1,200 feet in length and parallel to the Dock berth which I understand it is proposed to reserve for the military can be laid in, and military sheds if required could be very conveniently placed on the remaining half of this Port Trust block (available space about 650′×70′). Sweeping away from the military berth along the dry dock to the ordinary passenger terminal at the pier head the alignment allows of the military transport work and the ordinary passenger traffic being conveniently dealt with directly off the main line each at its own berth with sidings connecting the two which should facilitate the handling and interchange of stock.

(*c*) It also permits of the fullest use being made of the reclamation area as it concentrates Railway sidings along the edges of the reclamation and leaves the large central area available for buildings, etc., connected with the passenger service. If the sweep to the pier head runs too close to the dry dock and more space is required between it and the Railway lines, the blue alignment can fall back to any position such as that shown in the Agent's alternative line without affecting its other advantages.

(*d*) It enters Victoria Terminus, not as do both the Agent's alignments, separated from the passenger station by the goods yard, but alongside the present passenger station with the existing departure road between the present and future passenger lines and available for both, so that there will be no necessity for dividing through trains to Bombay from upcountry into "Victoria Terminus" and "Ballard Pier." All trains can stop at Victoria Terminus, where all those not intending to pass to the pier head can alight with the same convenience as at present and similarly all 'down' through trains can be made up at the Pier terminus, those wishing to entrain at Victoria Terminus being able to do so as conveniently as at present.

(XVII). It will, however, be noticed that this alignment not only reduces the present accommodation in the Victoria Terminus goods yard but it cuts off that yard from access by road save by a level crossing. In view, however, of the trains to and from the Pier terminus being confined exclusively to "Passengers" this last is a slight disability in comparison with the many similar obstructions which exist in far busier places in Bombay, and, if necessary, it can be easily relieved by giving access to the goods yard from Frere Road by a new road alongside the branch line through the end of the Hospital compound or possibly by an overbridge from the south-west corner of the G. I. P. yard.

It has been stated above that to displace goods yards so well situated as Carnac Bridge and Victoria Terminus at the precise time when the provision of additional Dock accommodation close to them will increase their usefulness could only be justified by benefits accruing to the public markedly over-balancing all present advantages to particular branches of the trade. No such prospective benefit has been shown and I may say at once that after the fullest consideration I do not believe it can be shown, and I feel sure that if the trade were consulted they would agree with me in dismissing any such idea from the discussion at this stage. In view, however, of the fact that ultimately, say in 7 years' time, such a large percentage of the united traffic of these yards may be expected to be diverted to the Harbour Line, it does not seem unreasonable to suggest that either the two yards—one of which we know is not fully occupied for a large portion of the year—should be combined after the B. B. & C. I. contract terminates

at the end of next year, or that a redistribution of the two properties should then be made which will compensate the Victoria Terminus yard for the cession of such area as may be found necessary for supplementing the terminal passenger service. The space that will be required is not likely to be so much as to incapacitate the traffic of the goods yards if the combination or re-distribution is made judiciously and if subsequently it is found that more space is really required, it will then be time enough to consider its acquisition.

(XVIII). The endeavour then should be to re-arrange the two goods yards in the first instance in a manner which will

(i) leave their present capacity practically undiminished,

(ii) give all the passenger accommodation that is likely to be needed for some years at any rate to supplement the pier terminal,

(iii) allow of extension either to goods or passenger accommodation—when experience proves it to be essential—being effected with the least possible disturbance of working conditions.

I dismiss the combination of the two yards as offering fewer advantages to the trade than a system of competing facilities under independent control, and on Consulting Engineer's plan No. 5780-A I have suggested a re-distribution of the areas of the two goods yards and a re-construction in connection with my proposed alternative alignment which seem to me to merit careful consideration. The advantages as they appear to me of this alignment (shown in blue lines) direct from the Victoria Terminus passenger station to the pier head I have just described. The re-construction of the yards, which I now suggest, contemplates placing the passenger entrance from the pier head *permanently* alongside the Victoria Terminus road exit and keeping the G. I. P. goods yard entirely to the east, *i.e.*, between the passenger lines and the Frere Road. The space that might be devoted to the passenger service, I have shown coloured lake and the re-constructed G. I. P. goods yard coloured green. Practically no space is taken from the Carnac Bridge yard while the G. I. P. yard is, if anything, slightly increased, in spite of space being found for a considerable number of passenger sidings, quite sufficient at any rate to supplement the pier service for some years to come. The advantage of this arrangement is that it allows of passenger and goods traffic being conducted from the very commencement of the terminal service in what appears to be the most suitable positions and on land already in possession, and that it avoids the disturbance of any part of the new connection and involves the least possible disturbance of working arrangements should extension be found necessary in the future. If and when that day comes, the acquisition of St. George's Hospital may be unavoidable, or on the other hand experience of the Harbour Line may show that any required extension can be better provided elsewhere, (see however paragraph 16 below); in the meanwhile, however, there is at any rate a workable plan which can be laid out at any time in entire independence of any uncertainties such as the time by which St. George's Hospital site will be available.

(XIX). Another plan would be to acquire the area including the Native Infantry Lines plot, the Salvation Army barrack and the Municipal Stores—which has already been recommended for Railway purposes by the Land Committee—and utilise the combined plots for a new local goods yard, served from the Market Road; staff quarters being placed on the re-entering angle. The acquisition of this plot for any Railway purposes is however extremely uncertain in view of the number of claimants to it—a condition from which I understand the Hospital property is free—and it is useless discussing the merits or demerits of any alternative arrangements that could be made here until it is known whether the site will be available or not. The cost of the site moreover would probably not fall far short of the Hospital property and the plot would be more suitable for local and suburban passenger service (see paragraph 16 below) than for a goods yard.

(XX). The Agent's "alternative alignment", which I have marked No. 2 on plan 5780-A, must make the acquisition of the Hospital a practical necessity; it also takes some 300 feet off the B. B. & C. I. shunting neck in its compulsory new position. Could it be *proved* now at once that want of room will make it absolutely essential to acquire the Hospital property, I would still prefer my blue line alignment for the reasons already stated and for those reasons as well as with a view to making the best use of the Hospital premises I would still reconstruct the yard if possible in the first instance as shown on plan No. 5780-A, keeping the new passenger arrangements (lake) alongside the Victoria Terminus passenger station and extending the goods yard (green) to the east and north. The B. B. & C. I. shunting neck would then go to the back of the Hospital land and I would use every endeavour to retain the main buildings of the Hospital and its pleasant grounds for staff quarters if the expense involved in adapting them to the purpose did not prove too considerable. The long lofty rooms and continuous verandahs, and most of all the concentrated arrangements for lavatories and latrines suitable for a hospital can only be converted to domestic purposes at considerable cost, as an inspection of the buildings will readily show.

(XXI). I have no other alternatives to suggest within the Railway yards, and I come to the alignments outside Railway premises that appear to me to have *prima facie* claims to consideration. I have shown them on plan No. 5780-B, but before discussing them a few remarks are necessary in explanation of the altered shape of the pier and reclamation area shown in dotted black lines both on this plan, and on plan 5780-A. This altered shape in no way affects the alignments which have so far been considered. I have, therefore, refrained from complicating the discussion by the introduction of a new element until unavoidable.

Some doubts have, I understand, lately been raised as to the safety of allowing vessels to enter or pass from the Docks while others are lying at the Deep Sea pier, and in consequence a modification of its design will probably be required which may possibly take a shape along the sea-face somewhat as indicated by dotted lines. If the design is altered in this way and the land side of the pier is built to a curve as shown, it will allow of a broad-gauge railway line being run along the present Ballard Pier out to the new pier head, and in that case an alignment from the Victoria Terminus station as shown in a heavy black chain line on plan 5780-B might be feasible. Whether it is so will depend principally upon Government being willing to allow the railway to cross the General Post Office compound. So far I understand no work beyond clearing the site has been sanctioned, and the estimates have yet to be approved. If the projected arrangements on the site can be modified so as to allow of its being crossed by the railway in either of the positions shown in the plan, there are yet the following drawbacks to be considered. The line will cross four public roads in all, and the Tramway lines also will be crossed three times—or four when the Tram runs eventually to the pier head as it will probably do. If these level crossings are not objected to and the western alignment inside the G. I. P. yard is taken, it will, so far as that yard is concerned, practically correspond with the alignment advocated in plan 5760-A with the additional advantage, however, that access from the Frere Road to the goods yard is not cut off, and that the connection with the pier is quite remote from St. George's Hospital. It then only remains to consider the cost of acquiring the necessary land for the connection, and whether suitable railway arrangements at the pier can be laid out.

(XXII). From what I can learn there should be no difficulty in acquiring the land and obtaining the greater part of it at a reasonable cost. The strip coloured brown along the west side of Mint Road belongs, I understand, to the Municipality, and so far as it is built over at all is occupied principally by single storied buildings of no great apparent value, only the large and lofty buildings at the corner south of the General Post Office compound would appear to be costly, and for these, no doubt, very heavy compensation would be demanded. The rest of the land required is either Port Trust property or in possession of the Government Mint. Of the former all is vacant land save where two lofty buildings stand at the corner cut by the railway. These buildings, I understand, are on 50 years' lease with 30 years or so to run and would have to be acquired with probably heavy compensation. The land needed in the Mint

compound is all vacant. It may, I think, be taken that the acquisition of the land for this alignment will perhaps be somewhat less costly than the entire Hospital site, but will be many times more costly than the strip of land from the Victoria Terminus to the reclamation required for the blue alignment shown in plan 5780-A.

(XXIII). As to the suitability of the railway arrangements that can be made at the pier head, no such arrangements are possible unless the Port Trust incur considerable expenditure in curving the land side of the pier as shown on the plans in dotted line, and direct access to the military berth—supposing it is decided to place it where shown on the plans—will only be possible either by a semi-circular approach of 850 feet radius or by a back shunt from the passenger terminal at the pier. The first occupies too much valuable space and is otherwise not to be recommended, and the second is far too cumbersome a process to be satisfactory. On these grounds and on account of the large additional cost thrown upon the railway and the Port Trust by this alignment, I think it cannot stand comparison with routes confined to Victoria Terminus yard, and when to the disadvantages of cost and unsuitable terminal arrangements are added the inconvenience caused by the numerous road and Tramway crossings and the severance of the site just acquired for the General Post Office, I think the consensus of opinion will be that it must be finally rejected.

I have considered the same alignment freed from the incovenience of level-crossings by carrying the railway overhead. This necessarily will add enormously to the cost and, moreover, not only will an overhead line in the G. I. P. yard make the convenience of passengers, which is secured by the blue line in plan 5780-A, a matter of extreme difficulty if not quite impossible, but allowing a headway of 16 feet over the streets crossed, it would not be possible to reach the pier save by a gradient of about 1 in 80 running down to the reclamation level at about 1,600 feet from the pier head. All the Military transport arrangements, therefore, would have to be conducted on a back shunt over the passenger station lines, and the entire arrangements at the terminal would be so hampered by the graded approach as to be unsatisfactory in the last degree. It occurred to me that possibly the convenience of ocean-going steamers might be better served by the pier, and reclamation being raised a few feet in which case the reclamation level could be reached earlier, but a consideration of the average freeboard of vessels and the variations in sea-level between extreme high and low water lead me to think that no advantage would be secured by the considerable expenditure involved in raising the level of the pier and the reclamation. An overhead line, therefore, to the pier on any alignment by way of Ballard Road is, in my opinion, even less to be recommended than the similar alignment on the level which I have rejected.

(XXIV). One more route which I have shown in alternative on plan 5780-B by solid and dotted green lines will, I think, exhaust the question of alternative alignments. Any alignment between the two green lines (the dotted green is probably the best) has the same advantages as regards the arrangements in Victoria Terminus yard as those claimed for the blue line in plan 5780-A, and would seem to serve both the Military and Passenger service at the pier equally well though with slightly less economy of the reclamation area. It would also have the additional advantages of causing no interference whatever with the Hospital premises, of leaving access open between Frere Road and the goods yard, and possibly the outwards goods shed would not require to be removed. But it depends entirely upon the willingness of Government to give up the site lately acquired for the General Post Office. If this can be done it is probably a better alignment than that shown in blue lines on plan 5780-A.

(XXV). *Question* (*d*). The only alignments, therefore, that in my opinion hold the field for discussion are—

(i) The one I have marked blue in plan 5780-A, the apparent merits of which I have already described;

(ii) Some alignment between the green lines in plan 5780-B (the dotted line for preference), which, if Government are prepared to consider at all, should be discussed on the same lines as No. (i) above; and

(iii) Any alternative which necessitates the entire and early acquisition of the St. George's Hospital, such for instance as the alignment which the Agent has shown in dotted red on the plan.

(XXVI). And for the following reasons I do not think the third alternative should be discussed until the first two have been most thoroughly considered and proved to be impracticable or inadequate. The statement has been made in this note that whatever alignment is selected for temporary access to the pier should fit in with the final and permanent arrangements decided on at the pier and at any rate approximately, if not actually, coincide with the ultimate final alignment through Port Trust property, and it is a statement which has a very important bearing upon the question of adopting any route which necessitates the acquisition of the Hospital property. If I am right in thinking that the blue line arrangements at the pier head shown in plan 5780-A are best suited to the military and ordinary passenger service and will most economise the space on the reclamation, then the blue line connection (or green line in plan 5780-B) through Port Trust property is obviously more advantageous and less costly than any line involving the acquisition of the Hospital premises. It is also clear that while a connection on either the blue or the green lines can be made ready by the time it is required, *i.e.*, within four years, any alternative disabling the Hospital suffers from the disadvantage that it cannot be laid until the Hospital site is available, and for this reason may be as impracticable for obtaining temporary access as the Carnac Bridge alignment which has been rejected. For, before the Hospital site can be made available for placing a shunting neck all through its back premises and running a railway across its area, a new Hospital must be ready elsewhere, and it must, I think, be taken for granted that the din of constructing these works, the influx of railway labour on to the premises, and the demolition of several buildings—which, though now only in course of construction, are far advanced—will disable the Hospital from continuing where it is, not merely when the new arrangements are in working order, but while their construction is in progress.

If a new Hospital is built elsewhere, the G. I. P. Railway are probably right in their estimate that its construction, together with all its quarters and out-houses will take three years to complete ready for occupation,and the additional time that will be occupied in deciding upon the new site and in the preparation and final approval of plans up to the most recent scientific standard in an uncertain quantity. It is, however, safe to say that the more hurried the move the less satisfactory is the new Hospital likely to be found, and there can be little doubt that Government and their expert advisers in this matter will prefer to give the matter of the removal and reconstruction of the Hospital the most deliberate consideration in all its bearings before coming to a final decision. Any plan, therefore, of connecting the pier with the railway, which, while being in itself satisfactory, includes within its scope the acquisition of the Hospital property as a *future possible contingency* and so allows the respite necessary for considering its effective removal and reconstruction, is, in my opinion, preferable to any scheme which depends upon the *practically immediate acquisition of the site.*

(XXVII.) What I have to propose, therefore, is that the blue alignment on plan 5780-A and the general reconstruction of Victoria Terminus yard on the lines suggested in that plan be first considered in detail by the Port Trust and the two railways. Whether the alternative alignments shown in green in plan 5780-B should also be considered at the same time depends entirely upon whether the Post Office compound can be transferred to the railway, and this Government can no doubt decide at once before the discussion of plans commences.

Investigation of the proposals should be assisted by large scale plans and be dominated by the following essential consideration :—

(*a*) What arrangement is most suitable for serving the Military and ordinary passenger traffic at the pier head and at the same time most economical of the available reclamation area ?

(*b*) Apart from all other considerations, what is the *best* position for the new passenger line and sidings in Victoria Terminus yard ? Alongside the present passenger station as I propose or separated from it by the goods yard ?

(*c*) What is the permanent alignment through the Port Trust property which will best connect the arrangements (*a*) and (*b*), and is it certain that the land it traverses will all be available by the time the pier is ready for a connection with the G. I. P. ?

If when planned in detail to a suitably large scale the arrangements I put forward for consideration are for any reason found impracticable or entirely inadequate, then the only alternative seems to be the acquisition of the Hospital site within the next 3 years at least, and if that is impossible, the provision until the site is available of a temporary access likely to involve considerable additional expenditure in the long run, and if after consideration of the blue and green lines this alternative is finally decided on as essential, a full explanation of its necessity should be furnished.

It is hardly necessary to compare the cost of the alignment I propose with that of others ; it is clear that it is cheaper at the outset than any alignment that involves the taking up of the St. George's Hospital, and if extension in the future is necessary—and the conclusion derived from the above discussion is that only the Hospital site will be suitable for extensions—the cost of the property should be much the same then as now. The cost is set down by the Agent as follows :—

	Rs.
Buildings	12,50,000
Land	17,00,000
Total ...	29,50,000

This does not, however, I understand, include the entire cost of the new buildings under construction, which will probably bring the cost under the head Buildings to 15,00,000, and the cost of the land at Collector's valuation is, I understand, approximately 40,00,000, giving a total of about 55,00,000 or as much as the whole of the G. I. P. schemes (*a*) to (*e*). At whatever time the site may be acquired, however, Government no doubt in accordance with recognized procedure (Government of India Circular 327-R.C., dated March 11th, 1902) will transfer the land to the railway at cost price, and the buildings will presumably be taken over at a valuation. Meanwhile until the question is decided as to whether the Hospital site is essential for the railway in the immediate future or not, Government will no doubt consider the desirability of stopping the work on the many buildings at present under construction. Several minor structures are directly on the line which the B. B. & C. I. shunting neck must take if the connection with the pier cuts through the Hospital compound, and it is obviously waste of money to complete the new main buildings if radical alterations or entire demolition may be needed immediately after their completion.

5. *The Frere Road Overbridge.*—I am glad to see that the G. I. P. consider the necessity for this to be unquestionable. This coincides entirely with my own opinion. The allocation of the cost accepted in 1892 referred to in paragraph 5 of the Agent's letter was as follows :—

	Rs.
G. I. P.	4,32,650
Municipality	1,49,350
Port Trust	1,76,065
Total ...	7,58,065

The question of reconsidering the allocation can be taken up subsequently when the chief features of the main scheme have been decided.

6. The proposals made by the Chief Engineer, Public Works Department, Bombay, may now be considered.

It is no doubt true that a definite policy is needed to prevent mistakes, costly to remedy in the future, being made in respect of the disposition of lands in the island, but the trade and the public have a right to expect that this policy will at the same time be based on considerations of their convenience and will point in the direction of *improved and cheaper facilities for both goods and passengers.* The relief of congestion both in business and residential quarters, the cessation of the nuisance caused by a concentrated heavy cart traffic and the cheapening of the transport of produce were the principal aims of the Port Trustees, when they formulated their scheme for the Harbour Line and the keynote of their proposals as of all serious proposals of the kind is expressed in the following few words spoken by one of the witnesses before the Commission in November 1899. "*The chief means of effecting economy in the cost of handling is the maximum of railway accommodation.*" The Chief Engineer, Public Works Department, proposes to benefit Bombay by an exactly opposite course. His aim would appear to be not the maximum of railway accommodation but a minimum, to be obtained by curtailment and "compacting" of existing facilities, and in the words of another of the witnesses before the Commission " compactness commonly means congestion, a block in business and extra expense."

7. The first proposal is that **as far as possible Railway stores, workshops, quarters for Staff, Police, etc., should be out of Bombay north of Parel or Dadar and that such buildings as must be in Bombay itself should be more than one storey in height so as to conserve space.**

(I) This is no new gospel. For years past both this Government and the Consulting Engineer for Railways have turned their attention to the reduction of railway establishments in the island, and in March last year, at the instance of the Consulting Engineer for Railways, a Committee was appointed to consider and report upon the whole question of what lands throughout the island of Bombay could be made available for the erection of quarters for the railway police, and the employés of the G. I. P. and B. B. & C. I. Railways, and for other purely railway purposes, and how they might best be apportioned for the several requirements to be satisfied. In making their recommendations the Committee necessarily accepted the limitations which practical considerations of safety, efficiency, and full utilization of land set to the wholesale exclusion of railway establishments from the island.

(II) The G. I. P. and B. B. & C. I. Locomotive and Carriage and Wagon shops are placed most conveniently together at Parel, and it is presumed that no question arises as to the expediency of sacrificing the large sum expended on them with a view to removing them some short distance further north. Owing to traffic development extra space will soon be required for both these shops ; some of it is now under negotiation, and some of it has long been in contemplation to obtain by moving the Carriage and Wagon shops of the G. I. P. to Kalyan, and the main stores of the B. B. & C. I.—which now crowd up their shops—elsewhere as will be explained in the sequel. The Carriage and Wagon shops of the B. B. & C. I. Railway also may possibly before long be moved out of the island. But these measures will merely allow the necessary expansion of the Locomotive shops, they will not set free a single yard of the land at present occupied nor are the contemplated additions to the existing boundaries in the least likely to encroach upon any other interest in Bombay.

(III) The G. I. P. stores are at present at Frere Basin, and, as contemplated years ago and now arranged, this site is to be handed over to the Port Trust, the railway getting an equivalent up the harbour. The ceded railway land will form a valuable continuous extension of the Port Trust foreshore property which will enable them to deal suitably with sea-borne coal.

The subsidiary stores needed for the shops of both railways are not on a large scale and must remain where they are at the Parel shops where the stores are consumed.

(IV) On the recommendation of the Committee referred to above, the housing of the entire railway Police Force required for Bombay had been arranged for on a single plot of land near Dadar Station. The site was carefully selected, but as it encroaches somewhat upon one of the projected schemes of the City Improvement Trust, every endeavour is now being made to find a new and unencumbered site so as to avoid any interference with the operations of that Trust.

(V) The quarters for the railway staff in Bombay have been limited to those employés who, it is considered essential, should live in proximity to their work. Where space is limited the designs are of two or more storeys, and those for the superior quarters are in the hands of Bombay architects so as to ensure that all Municipal requirements shall be met. In some cases there may be no necessity for making the inferior quarters for menials of more than one storey, as the re-entering angles of railway yards which they will occupy and which are useless for any other purpose may suffice for the usual single floor plan.

Out of the four plots which the Committee recommended should be reserved for the B. B. & C. I. it is proposed to place staff quarters on portions of three, the total staff to be accommodated being as follows :—

Station Masters and Deputy Station Masters	8
European Workshop Foremen	2
Guards	30
Inferior Traffic Staff—Signalmen, Pointsmen, Muccadums and Shunting Porters, Brakesmen, Markers, Telegraph, Peons, &c.	231
Locomotive menials, Gas House and Carriage Examining Staff ...	31

Of these all but two Station Masters and two European Foremen are confined to two plots, one of them the area recommended and now partially acquired for the south extension of the Parel shops and for a coal-stacking ground ; a swampy area which the Company will have to improve and which is undesirable for any other but the Railway purpose to which it is to be put. In every plot of land devoted to yards or works which must be reached by railway sidings, there must be portions which cannot be reached by practical curvature, and it is an obvious economy to utilize such spaces for railway staff quarters. The rest of the staff—6 Station Masters and Deputy Station Masters and 30 Guards—are to be located on a small plot which, as it is shut in between Falkland Road, Bellasis Road and the Railway line, does not seem to be desirable for any other purpose.

The four Europeans to be placed at Colaba are two Station Masters and two Foremen in charge of the gas works there.

(VI) Of the thirteen plots recommended by the Committee to be reserved for the G. I. P., seven are required for purely Railway purposes, *viz.*, extensions of Victoria Terminus and Wadi Bunder yards ; extension of the Locomotive shops at Parel and for general offices for the Locomotive Department there ; extensions of Dadar and Matunga stations (both B. B. & C. I. and G. I. P.) ; and quadrupling the G. I. P. from Matunga to the north of the island. Of the six remaining plots one cannot be made available and one which has already been acquired is for the new Byculla goods depôt, only a re-entering angle unsuited by shape for sidings being made use of for staff quarters. The whole of the remainder of the staff of the G. I. P. Railway who at present live as best they can in the slums with much hardship to themselves and inconvenience to their employers it is proposed to house on four plots of land all of them situated alongside the railway, one practically in Victoria Terminus yard, two opposite the Chinchpokli goods depot and one the G. I. P. old "Stores" at the G. I. P. Byculla Locomotive yard. Owing to their proximity to railway lines, yards and shops, none of these plots would seem desirable for residential quarters or for any other than railway purposes. The

entire staff which the Committee recommended should be accommodated on these 5 plots is as follows :—

Station Masters, Foremen and Carriage Examiners employed at the Victoria Terminus	12
Station Masters and Assistant Station Masters at Musjid, Mazgaon, Chinchpokli, Currey Road and Parel	10
Station Menials from Victoria Terminus to Parel (Signalmen, Pointsmen, Muccadums, Brakesmen, Platelayers, Gatemen, &c.)	175
Locomotive Foremen and Inspectors, Drivers and Shop Mechanics ...	48

(VII) Will anyone contend that the railway service on which Bombay so much depends would be as efficiently carried on if the employés described were housed miles away from their work? If from a consideration of the labouring classes displaced by their demolitions, the City Improvement Trust think it a matter of importance to re-house them in the vicinity of the scene of their labour, "*a fortiori*" is it important, that for the convenience and safety of the public, the men upon whom these conditions depend should be housed so that they can reach the scene of their normal duties punctually, and promptly respond to emergent calls within their sphere of action. Station Masters' duties are ordinarily from 10 to 22 o'clock and from 21 to 10 o'clock. Signalmen, pointsmen, hamals, &c., work in 8 hours' shifts 10 to 18, 18 to 2, 2 to 10. The normal hours of workshop men are in daylight it is true, but for night shifts which occur frequently or for making overtime the nearer the man is to his work obviously the better for both himself and his employer. Workmen's trains will, it is hoped, lessen the difficulty of the City Improvement Trust with regard to their displaced working classes, but such trains will not assist the railway employé leaving or coming on to duty between the hours of 22 and 4 o'clock, nor is it advisable that any staff with regular and responsible duties to perform in the railway service should be connected with the scene of their avocations only by communications liable, as all railways must be at times, to irregularity. From the point of view of the public convenience also it is better that the number of railway employés using the rail should be kept as low as possible. Every such person displaces an ordinary passenger and even with a train service at intervals of a few minutes it will be difficult to avoid overcrowding in the suburban trains during workmen's hours.

8. The Chief Engineer then asserts **that the time must come, if it has not already arrived, when all questions of competition between the two Bombay Railways should cease so far as work within Bombay City limits is concerned.**

And proposes—

(a) that there should be one control for the working of both lines south of their point of junction,

(b) with one central terminal passenger station at and from which all mails mixed and long distance passenger trains (in fact all but local and suburban trains) of both the Great Indian Peninsula and the Bombay, Baroda and Central India Railways shall arrive and depart,

(c) and separate goods depots for (i) Trade for local consumption, (ii) Export and Import,

(d) with such arrangements as may be necessary for small stations to meet local and suburban passenger traffic.

9. (I) Competition when reasonably conducted is generally supposed to benefit the public, and complaints to the contrary in connection with these two railways have not, so far as I am aware, been made ; indeed it is not long since the Chamber of Commerce stated to the special Commissioner for railways that the convenience of the trade was met by both the Companies in every reasonable way—but even if the competition gave unsatisfactory results it is difficult to understand how two railways handling the entire traffic of the great northern

marts to and from a common port and therefore necessarily in direct competition for this traffic are to cease from competing, directly some fixed point short of that port is reached or what advantage to the public could result from such an arrangement. Clearly competition commenced at one end of the respective lines or at any point of contact on their lengths must either continue up to the competitive goal or cease on the entire routes. For one railway to hand over to the other at some common point short of that goal the traffic it has succeeded in attracting to itself would speedily result in the terminal controlling railway not only absorbing the whole of the traffic which has a choice of two channels to and from up-country but also obstructing the non-competitive long distance traffic of the other line. Railway managers are as human as other people and given exclusive control at the base or end of operations it requires, but little imagination to realize that not only must the railway having such power necessarily control the despatching market but that almost insensibly it will give preference to its own traffic in both directions in those many ways so well-known to railway managers which eventuate in complete command, the enrichment of the controlling Company at the expense of the controlled, and the denial to the public of the right of selection and its attendant advantages.

(II) Government have already provided the proper and only equitable method of dealing with railways whose common duty it is to serve the interests of a city possessing several stations suitably placed for trade and travel. Each railway has by contract complete running powers over the other so that stations not served direct by the one are readily accessible by the other and any tendency on the part of one line to obstruct the traffic of the other being susceptible of immediate reciprocation, it is obviously in the interests of each to deal with the traffic of the other as if it were its own. Thus every part of Bombay city is equally well served and the several trades are dealt with each in the locality most convenient to it; conditions which would be automatically threatened if in substitution of the existing arrangements a single control were to be established over the few terminal miles of two separate Companies at the end of hundreds of miles of competing traffic. Not only Bombay but every point of competition on the two lines between Bombay and the northern markets, and these markets themselves, would then be subjected to a practical monopoly by a single management. Apart from these evils to be anticipated from such unity of control it is hard to see what administrative or working advantages are anticipated from doubling the responsibilities and anxieties of one administrative office already working full pressure when two are already available to cater to the interests of the public and must in any case be maintained whether the terminal control is single or dual. Two heads are better than one at any time and the only valid reason for employing only one—two being available—is when the expense of two is prohibitive and avoidable.

(III) If to the above arguments, it is objected that both the Railway Companies serving Bombay will shortly become Government lines—as one already is—and that the complete and equal control which Government will then possess should be sufficient to protect the public from the risks anticipated to arise from the single control proposed in Bombay island, the reply is that the last argument in favour of utilizing two administrative offices in place of one is still unanswered, and that the object of Government control over railways—Companies' and State alike—is not to dwarf emulation and initiative, but while encouraging these forces, the exercise of which long experience has shown to be in the best interests of both the trade and their Railway enterprise, to confine them within the bounds of the legitimate competition provided for in the Railways Act.

10. (I) The next suggestion is **that there should be one central terminal passenger station in Bombay at and from which all mails, mixed and long distance passenger trains** (*i.e.*, **all but local and suburban**) **of both the Great Indian Peninsula and Bombay, Baroda and Central India Railways shall arrive and depart, and that Victoria Terminus, with easy and efficient connection with the new Docks, would naturally be this terminal station.**

In 1903 the number of long-distance passengers—*i.e.*, exclusive of all local and suburban traffic—booked in and out of B. B. & C. I. R. Bombay stations was approximately as follows :—

Colaba	55,000
Church Gate	85,000
Marine Lines	164,000
Charni Road	201,000
Grant Road...	316,000
Dadar	144,000

(II) It may no doubt be argued that as the B. B. & C. I. long-distance passengers have at present no alternative but to use the stations of that Company, these figures are not of much value in showing that Victoria Terminus and other G. I. P. stations south of Dadar instead of B. B. & C. I. stations would not equally well serve the convenience of the public. At least one reasonable inference, however, is to be drawn from the figures with the assistance of the map of Bombay. If Victoria Terminus is the most suitable place in all Bombay for the arrival and departure of long-distance passengers, it is natural to expect that the B. B. & C. I. stations in its immediate vicinity would show a heavier long-distance passenger traffic than the stations more remote from the G. I. P. terminus, but what we actually find is that Church Gate and Marine Lines, the two stations nearest to Victoria Terminus and serving the same localities, carried 249,000 against 517,000 carried by Charni Road and Grant Road—*i.e.*, barely one-half—and it is particularly noticeable that Grant Road took a number of passengers far in excess of those taken at any other station, the number here being approximately one-third of the entire number dealt with at the 6 stations Dadar to Colaba inclusive. The conculsion is, I think, obvious that Grant Road and Charni Road, although without the added convenience to passengers attaching to terminal stations, offer facilities to long-distance passengers to and from Malabar Hill, Cumballa Hill, Breach Candy and the districts of Tardeo, Kamatipura, Khetwadi and Chaupati which are not equalled at G. I. P. stations, Byculla to Victoria Terminus, and if statistics fail to convince, the personal experience of the numerous residents on Malabar Hill, Cumballa Hill and at Breach Candy will, I think, bring home to them the great convenience of a station at Grant Road some 2½ miles nearer their homes than Victoria Terminus. It also hardly requires demonstration that Colaba and Church Gate are more convenient than Victoria Terminus for the numerous clubs, business premises, shops and residential quarters—ever increasing—at the southern end of the Fort and on the Port Trust and City Improvement Trust properties towards Colaba. Not only are the two stations nearer these localities, but they are approached by pleasant open roads comparatively clear of traffic.

(III) If the public require it, there is of course no difficulty in attaching to the B. B. & C. I. Mails and important Passenger trains through-carriages to run to and from Victoria Terminus (as will be done eventually to and from the Deep Sea pier), but I cannot realize what advantage to anyone is anticipated from forcibly confining all long-distance passengers in the country to and from the greatest port of India to the G. I. P. group of stations south of Dadar and deliberately denying them the exercise of choice and the continued use of fully equipped stations, the convenience of which has been amply proved by the experience of the last 40 years. The advantage of this summary curtailment of long accustomed facilities needs, I think, very much further demonstration on the part of its proposer before the public can be invited to accept it.

11. For dealing with "goods," the suggestion is **that depots for goods for local consumption should be separated from export and import depots, and it is proposed to arrange for this as follows :—**

(a) The Foreign exports and imports depot to be in its natural place near the Docks and if possible all Foreign "Outwards" to go direct alongside the steamers in the Docks.

(b) **All local goods inwards and outwards to be kept away from the Docks so as to avoid occupying space required for the legitimate work of the Docks.**

(c) **All goods traffic to cease at all wayside and passenger terminal stations of both Railways in Bombay and all local goods to be concentrated at one large separate goods depot which it is proposed should extend—on land to be acquired for the purpose—from Grant Road to Mahaluxmi or even further north than that station; this locality it is stated being well situated for local trade.**

12. No one will dispute or ever has disputed the first proposal to deal with over-sea goods near the Docks. During the 10 years from 1859, when the extension of the B. B. & C. I. Railway from Surat to Bombay was sanctioned, to 1869 when the present terminal arrangements of that railway in Bombay were finally decided on, the whole discussion of the terminal site to be selected turned upon the recognized importance of obtaining direct access to the shipping in the harbour which the G. I. P. already possessed at Wari Bunder. From before the year 1860—when there were no Docks in Bombay and when it seems a great deal of over-sea traffic was conducted at Colaba—up to the present time the over-sea traffic has been dealt with as direct as trade conditions would allow at Colaba, Wari Bunder and Carnac Bunder and complementary to the extension of the Docks now in hand the Harbour Line from Kurla is about to be constructed with a view to further concentrating over-sea goods traffic at the Docks and at railway depôts close to and in direct connection with them.

It is unnecessary in this place to examine into the conditions which in this country are unfavourable to direct shipments. These conditions will no doubt undergo change in time and as facilities increase, meanwhile they will be better understood after a perusal of the evidence given before the Harbour Line Commission of 1899 where some explanation will also be found of the necessity for repeating at Mazgaon an institute so "out of date" and "tax on trade" as the Cotton Green at Colaba.

13. (I) Nor will anyone I think be disposed to quarrel with the general proposition that valuable space at or near the Docks required for their legitimate work should not be taken up by goods having no connection with shipping. It will be borne in mind however that much of the inwards over-sea traffic is stored, and ultimately becomes purely local traffic and conversely much that eventually goes over-sea is from the Railway point of view local traffic in the first instance.

But there is literally no end to the objections to be raised to the proposals for dealing with local goods which appear to have been prompted with less regard to the commercial aspect of the "land congestion" question—a point of view which concerns not only the great majority of Bombay citizens, but also a very large number of the public dispersed over the country at large—than to provincial administrative considerations.

(II) The proposal to deny to the trade facilities so long enjoyed in localities which experience has proved to be the most suitable and to force it in all its branches to remove to a site involving in many quarters additional cartage to the extent of 3 miles or more, and entire dependence upon a single Railway station and a single Railway administration appears to me as the very acme of that "compactness" which one of the witnesses before the Commission of 1899 feared as spelling congestion, block in business and extra expense. It seems necessary to remind the proposer of such a measure that the simple fundamental principle on which all true transport facilities must be based is *that trade may not and cannot be forced either into or out of channels and that "sufficient inducement" is the sole lever that can be employed to move it from established routes*, and having reminded him of this axiom it is I think needless to further labour the question and add to my own labour by exhibiting figures of the considerable goods traffic done at the various stations in Bombay. Some reflections on the utility of Carnac Bridge and Victoria Terminus yards have already been made in this note to which I would invite his attention, and in addition I would only ask him to look at the matter from another administrative or

municipal point of view and consider this question. Whether is it better for the inhabitants of the city that the enormous local traffic of Bombay should be dealt with at a number of stations, thereby distributing the cart traffic over the streets so as to render it comparatively unnoticeable, or that it should be concentrated at one point, thereby producing the maximum possible congestion and aggravation in the principal streets of the city ?

A principal cause of complaint against the Colaba Cotton Green, it will be remembered, is the concentration of cart traffic between it and the Fort and the Docks, and to remove this nuisance was one of the reasons for the projection of the Harbour Line by the Port Trust, but there is no analogy between the Port Trust scheme for *substituting a Railway for carting*, with attendant convenience and economy and a proposal for *substituting carting for Railway facilities* with seriously diminished convenience and enhanced expense that would probably prove the ruin of many a Bombay merchant. The one is a wholesome progressive step : to call the other retrograde is to treat it leniently.

(III) Incidentally it may be remarked that supposing such a proposal as the concentration of all the local goods out at Grant Road to be possible of entertainment, it would be a strong additional argument against forcibly restricting long-distance passenger traffic to G. I. P. stations south of Dadar. Where goods are dealt with in large quantities, there also merchants expect to find a long-distance passenger service.

14. (I) The next proposal is as follows :—

Local and foreign goods having been arranged for separately and a central terminal for up-country passenger traffic having been fixed, the Bombay, Baroda and Central India should be electrified south of Bandra so as to deal suitably with the local passenger traffic.

(II) Setting aside for a moment the arguments that have been advanced against the forcible ejectment of long-distance passengers from B. B. & C. I. stations south of Dadar and the compulsory closing of these stations against goods traffic, it may first be noted that while having resorted to these arbitrary measures in order to provide room for a large and increasing suburban traffic, the Chief Engineer proceeds to render them nugatory by saddling the B. B. & C. I. from Bandra to Grant Road with the entire local goods traffic of both the Railways serving Bombay. If he will look at the figures of this traffic and compare them with the figures under existing arrangements, he will see how far his proposals are likely to assist the capacity of the suburban service for workmen's trains between the north of the island and the industrial centres of Bombay which according to his estimate and so far as Railway facilities are concerned at Grant Road. For the purpose of discussing the suburban service therefore it may equally well be assumed that my arguments have prevailed, and that both long-distance passenger traffic and goods traffic will continue to be conducted as at present south of Bandra.

(III) As to what measures are possible for expediting the suburban service and increasing its capacity so as to allow of workmen being carried from the northern suburbs in large numbers within suitable times and at fares they can afford to pay, this is of course principally a question of ways and means. If it can be shown that the access of traffic gained by electrification or any other means will pay them, the Railway Administration will not be backward in making the improvement as soon as Government can place them in funds. If this cannot be shown, however, neither the Government of India nor the future lessees of the railway are in the least likely to incur the necessary expenditure unless either Bombay or the Bombay Government are prepared to provide the means or to guarantee the return. It is impossible to seriously consider the suggestion made elsewhere by the Chief Engineer in respect of these workmen's trains that " the railways might be pressed to try and meet the necessities of the position and run labourers' trains, which indirectly will benefit themselves, at cost price if not

even at a small loss." It is an axiom certainly in railway management that no railway can afford to let traffic go by if it can make the slightest gain by carrying it, and it is often possible for a railway to carry traffic with slight profit—even if it is only indirect profit in the shape of back loads—at exceedingly low rates if neither capital nor fixed charges are thereby increased, but these conditions are obviously absent from a workmen's service on any large scale, necessitating considerable outlay of capital, and when the lower class fares at present charged are barely more than remunerative. And how a railway is to indirectly profit by expending considerable sums on electrifying its road or, even without electrification, on adding to its rolling stock and station appliances and then carrying its passengers at cost price or less is a railway riddle which many an anxious Manager in the country would be glad to have solved. The object of Government, if I understand it rightly, is to reduce the congestion in Bombay by housing in the northern suburbs as many as possible of the labouring classes displaced from the city by the schemes of the City Improvement Trust, and in order to achieve this it is necessary that the house rent in these suburbs and the Railway fares between their homes and their work shall together be no greater than the rent which these displaced labourers would have to pay in the immediate neighbourhood of their work. The move to the suburbs is no doubt very necessary, but the position is brought about solely by administrative measures of Government, and the funds allotted for their execution would appear to be more properly debitable with the contingent expenses than the revenue of Railways, whose sole duty it is to provide transport at a price which will keep their business on a sound financial footing and allow of its expanding as the demand for transport expands.

(IV) It will be useful to see what improvement is to be anticipated from electrification. At present an average of 15 passenger trains, exclusive of mail and "through", are run daily between Colaba and Bandra in the Down direction between 5 and noon, and 32 between noon and mid-night, and in the Up direction 21 passenger trains are run between 5 and noon and 27 between noon and mid-night.

The only trains however that would be of use to workmen would probably be those which would land them at their working destinations in the morning between the hours of about 6 and 8, and enable them to reach their homes again between about the hours of 19-30 and 21-30. At present there are on an average 6 "Up passengers" reaching Colaba between 6 and 8 (and of the 6 two are through trains) and 7 Down passenger trains arriving at Bandra between 19-30 and 21-30, but under present conditions the quickest succession of local trains appears to be required between the hours of 9 and 11 in the Up direction—in which time 12 local trains arrive at Colaba from Bandra; and between 17 and 19 in the Down direction—in which time 10 local trains arrive at Bandra from Colaba. The average time taken for the run is 43 minutes and the average interval of departure is 10 minutes in the Up direction (3 trains starting at intervals of less than 5 minutes) and 12 minutes in the Down direction (4 trains starting at less than 5 minutes' interval).

(V) If we assume that the service during workmen's hours is brought up to a similar capacity, 6 workmen's trains could be given, but rather more than this might be possible for Up trains in the morning, and we may assume 8 workmen's trains arriving in Bombay between 6 and 8 and perhaps 6 trains arriving at Bandra from Bombay at the workmen's hours between 19-30 and 21-30. The Up trains are of most importance as the workmen must be punctual at their business premises, whereas when work is over many will doubtless find their way home by trams or on foot or make use of ordinary local trains outside the "workmen's hours." Each train would take 1,100 passengers; so we may assume that the present steam service could be expanded to accommodate about 9,000 workmen at suitable hours. So far as numbers are concerned, this would probably suffice for some years to come, but the cost of fares would not be appreciably reduced and that is the real essential.

(VI) In America the keenness of competition has led to the employment of electric Railways to an extent unknown elsewhere, and if we may judge from the reports of the principal Railways in that country, their success has been amply proved. On many lines the local and suburban traffic has doubled and more than doubled since electric traction has been substituted for steam, and at the same time the public have secured the advantages of a more frequent service, more rapid transit and largely reduced fares (in one case the fares are said to be just one-half the steam fares). Electrification of existing steam tracks either by the third rail or the overhead trolley system would therefore seem to be the direction from which to expect a solution of our problem by so reducing the cost of working as to allow the Railways to appreciably reduce their fares and yet retain a reasonable profit. But there would seem to be conditions in America—other than competitive—which do not apply equally elsewhere, the principal of which is probably the possession of cheap water-power. All our power in Bombay for many years to come and until some such scheme as that proposed by the late Mr. Tata is carried out, must be steam-produced which cannot compete in cost with water production. This is probably the predicament in England also, but whatever the reasons for the conditions there being different to those in America, the following extract from the *Railway Engineer* of February 1903 would appear to show that they *are* less favourable in England, and that there is still considerable doubt in our country as to the economy and suitability of electric traction for heavy compressed traffic :—

> "The Great Eastern Railway Company is anxious to provide facilities for carrying a greater number of passengers at certain times of the day without incurring the great capital expenditure which would be necessary to double the existing lines, particularly as, during the greater part of the day, the present train service is able to carry with ease all the passengers who present themselves. The carriages have been widened to the maximum width possible, and lengthening the trains would involve considerable structural alterations at the stations all down the line, so that the only possible solution of the problem is to get more trains over the line, and this can only be done by increasing the speed between stations, which, on the Great Eastern suburban lines, are so close together that the average speed depends almost entirely upon the acceleration of the speed when leaving the stations. Electrification is the fashionable remedy flippantly prescribed for all the evils from which railways are now supposed to be suffering, but electrically worked trains have not a faster acceleration than the Great Eastern suburban trains now have, *and they are moreover not suited for dealing with heavy rushes of traffic, at least there are no reliable figures at present available to prove that electricity is more economical than the locomotive.* In a word, the Great Eastern Railway Company cannot afford to electrify its suburban lines '*on spec*'; before it does do so, it will require to be quite positive that advantages, commensurate with the expenditure, entailed, will ensue."

The B. B. & C. I. is in precisely similar plight. For the greater part of the day its lines are quite equal to the traffic offering, but it wants to meet without loss a daily heavy rush of traffic. It has lengthened its trains, it is making the necessary structural alterations at stations, and has ordered a large number of powerful engines for the suburban service. It cannot afford to electrify its suburban line "*on spec*" : before it does so it requires some positive assurance that the expenditure will be commensurate with the advantages to be obtained by electrification.

(VII) The same article goes on to relate how the Locomotive Superintendent of the Great Eastern Railway endeavoured to solve the problem not by resorting to electricity, but by designing a remarkable decapod locomotive with such great power of acceleration as to enable him to put on as many trains as could be done by electricity, and how the Company were confident that with this engine they "had secured all the advantages

of electrifying at a comparatively small outlay." It may be taken for granted—in fact the text shows—that *economy of working* was one of the advantages closely investigated by the Great Eastern Railway before arriving at this conclusion, and, if a Great British Railway could find none in electrifying, it is at least possible that we in India may come to the same conclusion, though I do not wish it to be understood that I take the case to be proved by this one isolated example. The rapidly developing knowledge of the applications of electricity and the great improvements in electric gear made every day make the position now very different even from what it was only a year ago when this article was written. I merely cite the experience of a prominent English Railway Company to guard against too sanguine anticipations from electrification.

(VIII) Meanwhile until the economy of electric working which is to cheapen the fares as desired has been fully investigated under local conditions, we may look a little into the advantages of speed and frequency of service that it has to offer, and consider the further questions of carrying capacity and cost of electrification.

With regard to acceleration of speed, I find that the scheduled speed on the properly equipped American local and suburban electric railways with stops at every second mile or so, as between Bandra and Colaba, averages 27 miles an hour with a maximum speed attained of from 45 to 50 miles an hour. On one superbly equipped line it is true that a maximum speed of 65 miles an hour is attained which it is intended to increase to 80 or 100, and a rate of acceleration hitherto never attempted is in contemplation, *viz.*, 2 miles a second per second or 60 miles an hour in 30 seconds from rest, the highest acceleration yet obtained being 1·34 miles a second per second or 40 miles an hour in 30 seconds from rest. But the equipment of this actively competing line is far too heavy and costly for adoption in the non-competitive conditions of our own case, and I think if we take the performance of the decapod locomotive which saved the Great Eastern Railway from the expense of electrification, we shall be dealing fairly with the comparison. That engine attained a speed of 30 miles an hour in 30 seconds from rest, and if we take the same rate of acceleration and a maximum speed of 50 miles an hour—the average maximum obtaining on electric railways in America—and allow acceleration from 30 to 50 miles an hour at 1 mile per second and a stop of one minute* at each of the 10 intermediate stations, it will be found that the time occupied in the 10½ miles trip between Bandra and Colaba is 31 minutes 26 seconds against 43 minutes, the time at present occupied by steam, a gain that is of 11 minutes on the trip which even if worked to accurately does not seem to be worth any appreciable expenditure at any rate until the number of workmen to be brought in in two hours has so increased over 9,000 that 43 minute trips started at the shortest intervals possible are insufficient to deal with them, and if increased speed were the sole desideratum it is as open to us, as it was to the English railway, to avoid the additional expense of electrifying by the employment of an engine of the Great Eastern type, on the massive 82 lbs. B. B. & C. I. R. road.

* The length of the stops on the American railways I can find nowhere stated, but as we are dealing with the Indian working classes, we can hardly reckon on a stop of less than one minute.

(IX) As to frequency of service 9,000 workmen can be put in by steam in two hours with average departure intervals of 15 minutes, and this is likely to meet the case for many years. When this is insufficient and the existing local and suburban service—ever increasing with the increasing popularity of the suburbs of Andheri, Virar and Borivli—will not allow of sufficient trains on the metals in the given time, the automatic electric block will no doubt allow more trains to be interpolated, and we may perforce have to resort to electrification and a separate suburban track.

As to the carrying capacity of an electric service, it is hardly necessary to say that single motor cars carrying from 50 to 60 passengers are unsuitable to a heavy traffic confined within a short period. The proper place for such vehicles is on short unremunerative

branches with light traffic. Even taking a motor car to carry 100 passengers (and this would be a larger one than I have any record of) it would require 50 such cars—making no allowance for sick stock and repairs—running at 2 minute intervals and doing the trips in 32 minutes to put down 6,000 passengers in two hours, and the cost as far as I can ascertain would not be less than 15 lakhs without taking into account the cost of the power, the separate electric track, and the additional station facilities which would be needed for such a service.

And none of the American examples show heavy trains drawn by electric motors. Such locomotives are constructed to draw considerable loads on freight trains at low speeds, but for their rapid passenger service the practice is to combine motor cars and trailing coaches, the maximum composition that I can find being on the North-Western Elevated Railway of Chicago, where one powerful motor car of 640 Horse Power draws four trailers. The usual composition of an electric train, however, where speed and ready handling with the minimum of terminal arrangements are desired, appears to be 3 or 4 trailing cars with a motor at each end. Such a train would carry about 560 passengers or half the present B. B. & C. I. R. steam trains and to land 9,000 passengers in two hours would require—including the usual percentage for repairs—24 motors and 44 trailers, the cost of which, when added to the cost of electrifying, &c., would clearly be largely in excess of the cost of merely adding to the rolling stock required for a special service of 8 workmen's steam trains. On the recently electrified section (third rail system) of the Lancashire and Yorkshire Railway between Liverpool and Southport, each train consists of two motor cars (tare 44 tons) and two trailer cars (tare 26 tons) each 60′×10′, said to be the largest in England, and seating 66 passengers in the first class car and 69 in the third class. The length is 18 miles and the complete cost of the installation including Rolling Stock is given at £3,50,000 or about Rs. 2,91,700 per mile.

(X) Enough has been said I think to show that electrification, described by the Railway Engineer as "the fashionable remedy flippantly prescribed for all the evils from which railways are now supposed to be suffering," will require very careful investigation before it can be accepted as suitable for the conditions in Bombay and as the only practicable means of reducing the cost of the workingmen's railway fares.

15. (I) The final **proposal is to terminate the Bombay, Baroda and Central India at Church Gate taking up their station and sidings at Colaba and the line connecting them with Church Gate** and the remarks which accompany this proposal would appear to show that its object is to set free all possible land at Colaba for residential purposes, the spaces occupied by the Cotton Green, cotton presses and warehouses being considered specially desirable.

(II) A reference to the evidence given before the Harbour Line Commission will show that the lease of the Colaba cotton areas for residential quarters was confidently anticipated as the only adequate safeguard of vested interests against loss arising from the move of the Cotton Green to Mazgaon. After some 10 more years have elapsed therefore it may be taken for granted that residential quarters will spring up there as a matter of course, and it may be noted that on the scale of compound accommodation recently adopted in Bombay for superior residential quarters, the 161,000 square yards now occupied by the Cotton Green would accommodate from 50 to 60 such buildings, while the aggregate area comprised by the railway properties and the Gun Carriage Factory (shortly to be handed over to the railway), which is some three times the area of the Cotton Green, would provide for 150 to 180 more such quarters, or allowing space for roads say a total of about 200 new large residential quarters in Colaba. Add to this the City Improvement Trust reclamation, the further reclamations which will certainly be commenced before long (they were mooted 40 years ago), and the considerable number of

residential quarters already built in recent years between Apollo Bunder and Colaba, and add again the considerable population connected with the military depôt at Colaba—which I understand will shortly be increased—and the wisdom of taking away a railway station, however doubtful its utility in any period of the past, just when it will be more required than at any time in the preceding 30 years seems, to say the least, questionable. If the object in view is to set free space for residential quarters at Colaba, that, as I have shown, is already provided for by the move of the Cotton Green to Mazgaon, but to *demolish existing railway facilities* in the immediate neighbourhood of a quarter already large and rapidly increasing both in size and favour with the idea of further increasing its popularity and importance, is surely a curious reversal of the customary policy in every other city in the world to add to the well being of new residential quarters and to the value of the land and property by *extending railway facilities* to their immediate vicinity.

(III) A few present-day figures may assist in realizing what the position is likely to be 15 to 20 years hence when Colaba is a much larger residential quarter than it is now and probably also a more important military depôt. In 1903, *683,190 passengers* were booked in and out of Colaba in approximately equal proportions, and exclusive of cotton, coal, coke and railway material 7,500 tons of miscellaneous goods were handled (6,650 inwards and 850 tons outwards). Out of the 7,500 tons, 333 represented military stores and baggage (200 inwards and 133 outwards); 6,450 tons therefore represent the ordinary requirements of the residents in the vicinity, apart from all passengers' luggage. In the same year 74,000 tons of railway material and 29,000 tons of coal and coke for railway purposes, a total of 103,000 tons, were run out of the Company's Colaba basin and store yard, while the entire inward traffic in cotton—there are of course no outward bookings—amounted to 104,000 tons or about the same as outward railway materials.

(IV) If the 55,000 long-distance passengers in and out of Colaba (para. 10 (I) above) are deducted from the total passenger traffic at this station, there remains a total of 628,190 local and suburban passengers making use of the station—an average of 1,721 a day—figures which sufficiently show the great convenience of this station at the present day, and indicate the certainty of its increased necessity 15 to 20 years hence. The weight of necessaries required for the residents alone—6,450 tons—is about *one-tenth of the entire goods traffic dealt with by the B. B. and C. I. R. in the whole of Bombay island* in 1868, when a terminus at Colaba was decided to be necessary, and *about one-sixth of that entire traffic* if cotton is excluded. But if these figures are not sufficiently convincing, let us consider the meaning of the figures quoted for railway material.

(V) The 103,000 tons of coal and railway materials taken out of Colaba during 1903 is not a complete measure of the track capacity occupied by this traffic. As many as 10,000 tons of railway material alone have been and may again at any time have to be carried within one of the busiest months of the year. It must be remembered that not only are all over-sea materials for the B. B. & C. I. and Rajputana-Malwa Railways landed at and forwarded from the Colaba basin, but a great quantity of materials for other lines—both State and Company—up-country are landed here and forwarded through the agency of the B. B. & C. I. Sea-borne coal moreover is not landed for nearly six months in the year. When the entire store yard now at Parel is removed to the Gun Carriage Factory in the course of a year or two—as already approved by Government—the quantity of coal, railway material and stores passing over the rails may certainly be estimated at as much as 18,000 tons in one busy month, or 45 train loads in 30 days. The G. I. P. landing and stores yard has perforce to go up harbour in order that their Wadi Bunder basin and store yard may be added to the Port Trust property, and thereby a very similar quantity of material, in which the trade is in no way interested, is thrown upon the Harbour Line and the question arises: Is it *politic*—apart from the expense

of the measure—to further encumber that line and proportionately diminish its trade capacity by adding to its burden another 45 trains of non-commercial materials in a month and checking its working by a second "Stores junction" placed within a few miles of the Docks. Leaving aside all consideration of increased difficulty to the Railway in clearing its material over a foreign line and the locking up of Rolling Stock which this implies, it seems to me that such a step would only be justified by the attainment of some great compensating advantage which I altogether fail to find, and the difficulty of finding which is considerably increased when the cost of demolishing Colaba Station and the line to Church Gate Street and abandoning the Colaba basin and store yard is considered.

(VI) Unlike the G. I. P., the B. B. & C. I. Railway have no coveted facilities such as at Wadi Bunder to offer to the Port Trust or others in exchange for a new landing and store yard up harbour. The market value of land on the eastern shore in the neighbourhood of Sewree will be raised considerably by the advent of the Harbour Line and may be reckoned as at least as valuable as the land at Colaba basin and store yard. Even then if we assume that the Railway account will not be affected by the acquisition of the necessary land up harbour, Government will nevertheless have to incur the entire expenditure on reclamation, construction and Railway connection, in addition to sinking the expenditure already incurred at Colaba Station, between it and Church Gate and at the basin, an amount considerably over 13 lakhs exclusive of the connection with Church Gate. The additional expenditure on a new basin, store yard, junction and connection up harbour would be lightly estimated at another 16 lakhs so that over 30 lakhs would be expended and what would be gained?

(*a*) The relief of a Railway which is already to be sufficiently relieved by the Harbour Line.

(*b*) The addition of a burden to a new line on which nearly 50 per cent. of the whole goods traffic of two large Railways and their impending extensions must in any case be thrown.

(*c*) The addition of a few thousand square yards to the large space that will in any case be available for residential quarters, which when built will, together with their neighbours, certainly cry out against the short-sighted policy which deprived them of Railway connection.

(*d*) The deduction of an equal area, equally well suited for residences, from the space that will be available for residential quarters on the eastern shore which it is one of the objects of the Harbour Line to open up for that purpose.

(VII) If these arguments from the point of view of commercial and public interests are yet unconvincing and it is advanced that there are other objections of a more sentimental nature to the continuance of a terminus at Colaba—a recrudescence in fact of the objections raised by this Government in 1868 when they informed the Secretary of State that one of the main points for which they had so laboriously contended was "immunity from the inconvenience and nuisance of a Railway directly to the windward "of the town and on the seaward verge of the only place of recreation available to the "public of all classes and denominations." If these objections have also to be answered, it should be remembered that when Government made this protest against providing a terminus at Colaba they had already given the Railway a passenger terminus at Marine Lines and their preference for a terminus in the neighbourhood of Carnac Bunder instead of at Colaba was because they did not wish the Railway to go on at all south of Marine Lines. Church Gate as a terminus they vetoed altogether: they considered it to be objectionable on the score of health and convenience and as marring the beauty of the Esplanade, and they informed the Secretary of State that they had warned the Railway Company that "no railway south of the Marine Lines will be permitted *except on the*

understanding that the terminus is finally settled at Colaba." It seems clear therefore that the nuisance feared by the Bombay Government of 35 years ago was not of the Railway between Church Gate and Colaba, but of the Railway between Church Gate and Marine Lines. To that nuisance—whatever its precise extent—the public would appear to have become reconciled and with the addition of the overbridges now sanctioned at Marine Lines and Charni Road any lingering objections should entirely disappear.

(VIII) At Church Gate 2,259,005 suburban passengers were dealt with in 1903, figures which speak for themselves as regards the great convenience of that station, but if it was unanimously pronounced unsuitable for a passenger terminus in 1868, what must be thought of its suitability for this purpose at the present day when Colaba "suburban" being added the total suburban traffic here will amount to some 2,887,195 passengers in the year (or an average of 7,910 a day), and it is proposed to add terminal arrangements for an electric service to carry thousands of workmen during a couple of hours in the morning and evening of each day. Granted that steam and electric traction must go on side by side—by the Chief Engineer's own showing it must continue as far as Grant Road and even if India is to be denied the use of passenger stations south of Grant Road, it presumably is not proposed to spoil that already congested quarter as well by making a separate steam terminal there—the rapid electric service necessary will require at least 4 platform faces with sidings on which to stand trains ready to start the morning and evening services. Add to this the steam lines required and reduce them to the minimum possible working conditions, and it will be found that a terminal passenger station at Church Gate of much the same size as the present station at Colaba will be required, and the questions to be considered are: Where is it to be placed without causing most excessive annoyance? and having a terminal already with ample space at Colaba, is it not better to keep it there than to mar the most ornate and open space in Bombay with an ugly and noisy terminus?

(IX) Other arguments against the removal of Colaba could be advanced such for instance as the initial and recurring expense and the inconvenience involved in removing the Railway Gas Works, which, after careful inquiry, Government have decided are most economically placed at Colaba terminus, though I attach no great value to this contention as at any rate nothing can be moved from Colaba for 10 years or so until the Cotton Green moves, and by that time I hope gas will be as obsolete in trains as the oil lamps of a few years ago. But I do not wish to labour the question. I have already said enough to show that in my opinion no gain and much grievous harm will be done by amputating the Railway at Church Gate, and have stated the main considerations affecting the general public on which that opinion is based, leaving it to the Military Department to add their own views on the subject. I have only to add that if we look far enough ahead to the inevitable time when Back Bay will be a reclaimed residential quarter, reached by a sufficiency of overbridges, it seems impossible not to realise the irreparable inconvenience and difficulty to which we shall subject successive generations if we allow administrative or sentimental considerations to deprive a growing quarter of a Railway facility already of such value and which will be increasingly required in the future.

16. The Chief Engineer, as he says, has not attempted any proposals regarding the G. I. P. suburban traffic, as he considers that it can all be arranged for at Victoria Terminus with no extensions beyond *some* extra sidings and platforms. Extra sidings and platforms however occupy considerable space, and in my opinion the suburban traffic of the G. I. P. will call for even more attention in the not far distant future than that of the B. B. & C. I. Already some 40 local and suburban trains run each way daily, and in the evidence given before the Harbour Commission many of those best acquainted with the customs and aspirations of the Bombay population agreed in thinking that the Harbour Line would eventually open up a considerable suburban traffic, and I think no one looking at the alignment of this Railway on the map and

bearing in mind the practical certainty of Trombay before long being added to the residential capacity of Bombay island, can fail to anticipate that a considerable passenger and local goods traffic must ultimately spring up along the eastern shore. The Harbour Line with due space reserved for extension will be competent to deal with the goods traffic, but all passenger traffic on that line must stop for ever at Mazgaon as already decided, and I am unable to think that this traffic will be effectively served by tramways, electric or otherwise, running in connection with trains at Mazgaon. Such means of communication may serve for a few years after the opening of the Harbour Line, but I look forward with certainty to a line eventually connecting Trombay with the Harbour Line in the neighbourhood of Sewree with branches spreading over the Trombay peninsula and with a branch to join the main line at or about Kurla for direct up-country traffic. When the time comes for such a railway to be constructed, it must be joined to Victoria Terminus, possibly by way of Bhandarwada Hill and Mazgaon station on the main line or *via* Wadi Bunder and Musjid stations—overhead or otherwise—and then at any rate, if never before, will Victoria Terminus have to be enlarged for this local and suburban traffic, and in my opinion it is none too early to add the consideration of this matter to the general question of Railway arrangements in Bombay island—the subject of this note—with a view at any rate to the reservation of the requisite land.

17. The conclusions at which I have arrived after a careful consideration of the proposals before me are, I think, clear enough from what I have written. I will however summarise them—

(I) A passenger connection between the G. I. P. main line and the Deep Sea pier is essential, and it should be provided on an alignment that takes in the acquisition of St. George's Hospital compound as a possible contingency rather than on one which makes practically immediate acquisition essential.

(II) The Frere Road overbridge at Wadi Bunder is necessary.

(III) The recommendations of the Land Committee of 1903 for lands to be reserved for Railway purposes, including the housing of the Railway and Railway Police staff, are not extravagant, and the areas they have recommended are the best suited for Railway purposes and generally ill adapted for other purposes.

(IV) A single control over the two independent Railways running between Bombay and the north at a point short of the port is not possible, nor is it in the least desirable whether the Railways be worked by Companies or the State.

(V) To close the B. B. & C. I. stations south of Dadar to long-distance passengers, and so confine everyone in India travelling to and from its main port to the G. I. P. stations south of that junction, would be a forcible deprivation of the facilities of the past 30 years and a denial of the passengers' "right of selection" which since it serves no useful end would be perfectly unjustifiable.

(VI) The proposed concentration of 'local goods' at one depôt in Bombay whether at Grant Road or elsewhere is a complete reversal of the customary policy all the world over of increasing Railway facilities as trade and population increase. It is an unjustifiable attempt to force trade out of its accustomed and well-proved channels which, if persisted in, would result in increased freight charges to many trades and increased congestion in the city streets and—more remarkable than all—it would not serve the end in view.

(VII) It is of no use pressing Railways—State or other—to carry at cost price or at a loss. Railways are business concerns with but one marketable article 'transport.' If it will pay them to carry more passengers at reduced rates, they will do so, not otherwise. If fares less than the Railways can afford to charge are necessary for Government administrative purposes, the difference is more properly debitable to the Corporation or Department concerned, than to the Railways.

(VIII) The *number* of workmen to be dealt with for many years to come can probably be accommodated by the existing steam traction, but as reduction in fares is also essential for the achievement of the object which Government have in view, a system which will reduce the cost of working is what is desired. Electrification has accomplished this elsewhere, but that it will do so everywhere and in all circumstances is open to doubt. The cost and probable financial results of electrifying the Bombay Railways should now be carefully investigated.

(IX) The removal of the B. B. & C. I. south of Church Gate Station is undesirable in the interests of the public. It would be a withdrawal of Railway facilities to which the Colaba quarter by reason of its increasing importance and popularity has a better claim than ever in the past. Far from serving any useful end it would only serve to depreciate a residential area which it is the professed aim to develop; to proportionately diminish the area available for residential buildings in a desirable suburb which it is one of the objects of the Harbour Line to open up; to hamper that line with an entirely unnecessary burden; and to throw an entirely unnecessary expense upon Government. Against such considerations any sentimental objections on the part of a few residents should carry no weight. Such as may still linger can be removed by proper and sufficient overbridges as Government long ago realized and provided for as a condition of the Railway running along Back Bay.

18. I have only to add that I have endeavoured to discuss the whole of the proposals before me in the broad-minded and liberal way recommended by the Chief Engineer. That we differ so pronouncedly in our conclusions is, I think, entirely due to the different point of view adopted by each of us. I claim for mine that it is the point of view of the " public " which is or should be habitual to the Railway man whose constant aim is the maximum of convenience to the public and of facilities to trade compatible with a sound financial status, a point of view which necessitates a close investigation of general impressions, however alluring in order to make sure that the conservatism and vested interests which may at first sight have the appearance of obstructing progress are not in reality the sign posts indicating the directions in which progress is required, and the proper spirit in which to set about reform.

G. A. ANDERSON,
Consulting Engineer for Railways, Bombay.

Poona, the 2nd July 1904.

MILLOWNERS' ASSOCIATION,
BOMBAY, 21*st November* 1904

To

THE SECRETARY TO GOVERNMENT,
P. W. DEPARTMENT,
RAILWAY BRANCH,
BOMBAY.

SIR,

I have the honour, by direction of the Committee of the Bombay Millowners' Association, to acknowledge the receipt of your letter No. 2029 of 13th August 1904, with enclosures, on the subject of the extension of Railway communication and facilities within the Island of Bombay.

2. The New Dock, the New Port Trust Railway and the proposed New Cotton Green and Grain Depôt at Mazagon are undertakings that necessitate an exhaustive and careful enquiry into the whole system of Railway communication in this city, and my Association welcomes the enquiries that Government are making as an indication that the whole subject will be dealt with in a comprehensive and thoroughly practical manner.

3. With regard to the questions given in your letter, my Committee direct me to reply as follows :—

Question No. 1.—

Whether it is practicable and expedient to have all goods imported for places outside the Island, or brought from such places for export by sea, dealt with on the Harbour Side North of the Castle.

(*a*) The Committee of the Association are of opinion that it is practicable to have all goods intended for export by sea dealt with on the Harbour side north of the Castle, but they question the expediency of the arrangement if it is intended that all goods are to be stored in a central depôt in the vicinity of Mazagon.

(*b*) Opium and Cotton would certainly require separate sites, and with regard to the former this Association sees no reason for any change in the present position of the Government Opium godowns which are conveniently situated for the trade, and are reasonably near the Docks, provided the transit of Opium up and down the Frere Road is not interrupted by further level crossings.

(*c*) With regard, however, to the removal of the Cotton Green to the proposed site near Tank Bunder, this Association fully approves of the change, provided that the means of communication with the new Green are adequate and quick. At present it takes from 5 to 10 minutes to drive from the Fort to the Cotton Green ; to Tank Bunder it would take about 25 minutes ; and it is doubtful if the Electric Tram will get there very much quicker, as the traffic on the Frere Road will at times be very congested, and quick running will be an impossibility. This Association is therefore of opinion that if the Cotton Green is removed to the proposed site, it is absolutely necessary to establish a more expeditious and in every way satisfactory mode of communication (for instance, an overhead electrical railway if economically possible) which will take the public from the business centre in the Fort to the proposed Central Depôt, the New Cotton Green and the suburban districts beyond.

It is also most necessary that free access be possible with the Cotton Green for cart traffic both from the Docks and from the direction of Chinchpookly and Parel by over-bridges over the Port Trust Railway.

(*d*) With regard to other goods, this Association is of opinion that it is a question whether everything for export—however expedient it may be—can be stored in one Central Depôt (wherever situated), as the majority of goods received from up-country are sent down to Bombay to be financed and sold, and it is only after their arrival and sale that it is known whether the goods are destined for local or up-country consumption or for export by sea.

This Association is, however, in favour of a depôt being established at Mazagon, which it thinks would be extensively patronized by the grain trade if proper accommodation were provided for storage and adequate facilities, combined with economy, given for conveyance of goods by rail to the Docks for shipment.

To be, however, of any benefit to the trade, the present inadequate rail communication with the sheds and wharves in the Prince's and Victoria Docks must be remedied, and arrangements will have to be made to see that the greatly increased traffic by rail to the old and new Docks does not unduly interfere with the cart traffic, which, as long as present conditions of trade obtain in Bombay, must always be allowed for.

Question No. 2.—

Whether goods brought for local consumption could be dealt with exclusively or generally at or in the vicinity of Grant Road Station, or, if not, where goods yards for such traffic would be most conveniently situated.

This Association does not think it is possible that goods brought in for local consumption can be conveniently dealt with at a central station, as it is not known until after they are sold whether they are intended for local consumption or for shipment.

Question No. 3.—

Whether through trains for passengers from and to distant stations should be run to and from Victoria Terminus, provision being made for carrying travellers by sea to and from the deep sea pier and possibly disconnecting at Dadar or elsewhere passengers for Grant Road or other Stations on the West.

(*a*) The reply to this question is in the affirmative, if adequate provision is made for the projected deep sea pier to deal with all passenger steamers that come into or leave the port, and provided that the Frere Road crosses the Railway by an overbridge, as the traffic of this important thoroughfare (which will greatly increase with the advent of the new Dock) must in no way be interfered with.

(*b*) This Association welcomes the proposal of the removal of St. George's Hospital, as with the certainty of the trade of the port increasing, the extension of land in this region for commercial purposes will be an absolute necessity, and they hope, when the necessary changes are made in connection with laying out the site, it will be possible to widen the Frere Road in order to allow as free a run as possible to the proposed electric tramway service.

(*c*) This Association is not, however, of opinion that it is an absolute necessity that all long-distance journeys up-country should be started from the Victoria Terminus, as even if it is eventually decided that the B. B. & C. I. Railway terminate at Grant Road, they feel that this latter station may still be a very convenient one for a large majority of passengers going up-country on the B. B. & C. I. Railway.

Question No. 4.—

Whether, in the event of the previous questions being answered in the affirmative, the Bombay, Baroda and Central India Railway should stop at Church Gate or should be continued to Colaba for suburban traffic.

This Association is of opinion that it is not possible for the B. B. & C. I. Railway to stop at Church Gate Station for the following reasons :—

(1) It will be impracticable to provide adequate room at Church Gate Station to make it a terminus.

(2) No provision has been made in any of the proposals before the Association for the removal of the B. B. & C. I. Dock and Store Yard to a position further up the harbour.

Land, however, for building sites is urgently required at Colaba, and this Association hopes that when the Cotton Green is removed to the proposed site near Tank Bunder, Government will curtail the sidings at the Station to the lowest minimum compatible with the efficient working of a frequent service of passenger trains, and will prohibit the booking to this station of Opium and other goods that are not for purely local consumption.

This Association also hopes that it will be found possible to eventually move the B. B. & C. I. Dock and Store Yard to a position further up the harbour.

Question No. 5.—

Whether for carrying out such arrangements as are indicated, single control of the lines south of point of junction would be necessary or whether they could not be effected by co-operation of the two Railway Administrations.

This Association is emphatically of opinion that single control of the lines south of point of junction is not necessary, and they hope that if the proposals indicated are carried out, it will

be found possible to arrange for the co-operation of the two Railway Administrations, as they view with great apprehension the suggestion that the whole traffic should be under single control.

Question No. 6.—

Whether for suburban traffic there will be substantial need that each Railway Administration should have running powers over the line of the other up to points outside the Island, and, if so, to what points and whether there would be practical difficulty in carrying out such an arrangement.

The Committee of the Association think it very desirable that each Railway Administration should have running powers over the line of the other up to Kalyan on the G. I. P. Railway, and Verar on the B. B. & C. I. Railway. Substantial need for such an arrangement exists even now and will be felt more and more as people decide to live in larger numbers in the suburbs, and this Association hopes its suggestion will be found practicable.—I have, &c.,

SASSOON J. DAVID,
Chairman.

C. J. MICHAEL,
Assistant Secretary.

Appendix H.

Short-reeling of Yarns in Indian Mills.

No. 398-S.R.

GOVERNMENT OF INDIA.

FINANCE AND COMMERCE DEPARTMENT.

SEPARATE REVENUE.
Cotton Duties.

FROM

R. A. MANT, ESQ., I.C.S.,
UNDER-SECRETARY TO THE GOVT. OF INDIA,

To

THE SECRETARY TO THE GOVERNMENT OF BOMBAY, REVENUE DEPT.
" " " " " MADRAS, "
" " " " " BENGAL, FINANCIAL DEPT.
" CHIEF SECRETARY TO THE GOVERNMENT OF THE UNITED PROVINCES.
" REVENUE AND FINANCIAL SECRETARY TO THE GOVERNMENT OF THE PUNJAB.
" REVENUE SECRETARY TO THE GOVERNMENT OF BURMA.
" HONOURABLE THE CHIEF COMMISSIONER OF THE CENTRAL PROVINCES.

CALCUTTA, *the 19th January* 1904.

SIR,

I am directed to invite attention to the

With reference to the correspondence ending with your letter	No. 520 / 646 T. F. / 754 / 198 S. / 596—1 C.-5 / 2331	of date the 21st May 1903 / 26th May 1903 / 6th May 1903 / 29th May 1903 / 12th June 1903 / 5th June 1903	I am directed to forward a copy of a	To Bombay. / To other Governments.

Resolution by the Government of India in the Finance and Commerce Department, No. 5800-S.R., dated the 24th September 1903, appointing a Committee to consider the steps which

should be taken to prevent the short-reeling of yarn in Indian mills for sale in India. A copy of the Committee's report is enclosed together with a minute of dissent by Mr. Sassoon J. David, the representative of the Bombay Millowners' Association.

2. The Government of India have recently received information which, if correct, renders it doubtful whether any further action should be taken in this matter. It was formerly represented that many Indian consumers of yarn were ignorant and easily imposed upon, and the Government of India were therefore of opinion that short-reeling should be treated as a criminal offence, in order to protect such consumers against a fraud which they themselves were supposed to be unable to detect. The Government of India are now informed, however, that Indian hand weavers are not injuriously affected by the practice of short-reeling. The amount of cloth which should ordinarily be produced from a given quantity of yarn is said to be accurately known ; and it is stated that, if this quantity is not obtained from a particular consignment, the weaver will discard the yarn in favour of the produce of another mill. Indian weavers appear to be the only class likely to be defrauded by the practice of short-reeling : and if they are in fact not affected by this, it is doubtful whether restrictions of the nature originally contemplated should be imposed upon Indian manufacturers of yarn. I am to request that [with the permission of His Excellency the Governor in Council / His Honour the Lieutenant-Governor] the Government of India may be informed of the opinion of

Except to the Chief Commissioner, Central Provinces.

the Government of Bombay / Madras / Bengal / the United Provinces / the Punjab / Burma regarding this matter.

your opinion

3. I am also to request that the Government of India may be favoured with the opinion of His Excellency the Governor in Council / His Honour the Lieutenant-Governor regarding the various questions raised in the Committee's report. In particular, attention is invited to the points dealt with in the succeeding paragraphs of this letter. Spare copies of the papers referred to in paragraph 1 are enclosed ; and, should there be no objection, the Government of India desire that the Bombay and Karachi / Madras / Bengal / Upper India / Rangoon Chamber (s) * of Commerce may be consulted, and their opinions forwarded.

your opinion

*Not to Punjab and Central Provinces.

4. The Committee propose to amend section 12 of the Indian Merchandise Marks Act, IV of 1889, in the manner indicated in Draft A appended to their report. It will be observed that the first clause of that draft refers solely to yarn "intended for sale in India" ; and the penal clause which it is proposed to substitute for clause (2) of section 12 of the Act renders it punishable to remove, or to attempt to remove, such yarn, unless it is properly bundled and stamped. The Government of India are doubtful as to the practical effect of this limitation, the reason for which is explained in paragraph 3 of the Resolution quoted above :—No. 5800-S.R., dated the 24th September 1903. In order to obtain a conviction against the spinner under this section, it would apparently be necessary to prove that the yarn had been *intended* for sale in India. In the majority of cases this would probably be difficult or impossible ; and the practical effect would therefore be to relieve the manufacturers from all liability in respect of short-reeled yarns. In these circumstances the practice of short-reeling could only be stopped by continual prosecutions directed against the vendors of such yarns ; and it is doubtful whether this course would be justifiable, as it cannot be assumed that retail dealers are cognizant of the fraud in all cases.

5. The clause which the Committee propose to substitute for clause 2 of section 12 of the Act apparently applies to imported yarns, in so far as selling, or exposing for sale, or possession for any trade or manufacturing purpose, is concerned. I am to explain that the Government of India do not contemplate any interference with imported yarns after they have passed through the Custom House at the place of importation. The clause will therefore be recast so as to give effect to this intention, should the recommendations of the Committee be eventually accepted.

6. With reference to Drafts B and C appended to the report, and to Mr. David's minute of dissent, I am to enquire what unit should, in the opinion of the Government of Bombay / Madras / Bengal / the United Provinces / the Punjab / Burma (your opinion) be adopted for test measurements. The Government of India consider that it would be impracticable to measure all the hanks in each bundle of yarn, and to take the average so deduced as the unit. The alternative suggestions are that the hank, or the average of the hanks in a knot, should be accepted as the unit. If the latter unit be adopted, I am to enquire whether any maximum limit of variation from the standard length should be prescribed for individual hanks.—I have &c.,

J. CAMPBELL,
for Under-Secy. to the Govt. of India.

MILLOWNERS' ASSOCIATION,

BOMBAY, *6th April* 1904.

THE SECRETARY TO THE GOVERNMENT OF INDIA,

DEPARTMENT OF FINANCE AND COMMERCE,

CALCUTTA.

SIR,

Under the instructions of the Committee of the Bombay Millowners' Association, I have the honour to refer to your letter No. 5440-S.R., dated 4th September last, in which you requested the Association to appoint a representative to serve on the Committee then constituted to consider the question of the short-reeling of yarn for the Indian markets, and to frame the necessary instructions for the guidance of Inspectors in instituting prosecutions. The Bombay Chamber of Commerce was at the same time invited to appoint a representative. The representatives were appointed, and the Committee of the Association, having great interest in the matter and full knowledge of its difficulties, were at considerable trouble to place before Government certain facts and considerations which appeared likely to be overlooked, and the ignoring of which might have resulted in measures ultimately as unsatisfactory to Government as to the Industry. The representative of the Association was unfortunately unable to adopt the views held by the official members of the Committee, and by those members who were concerned in the Import trade ; but my Committee have no doubt that the views set forth by their representative in his minute of dissent, regarding the impracticability of certain of the proposals, will in the end be found by Government to be just. They conceived that it was as much to the interest of Government as of themselves that no measures should be instituted without the fullest consideration of every argument founded on real knowledge of the trade. They have therefore, since the official Committee made its report, awaited with confidence a further communication from Government as to the progress of the proposals. It has, however, come to their knowledge that such a reference was recently made by Government to the Bombay Chamber of Commerce, and they feel sure that it must have been by oversight that their Association was not at the same time afforded an opportunity of expressing an opinion on the points raised. I am accordingly to beg that Government may be pleased to favour my Committee with a copy of the papers in question, and may permit them to offer any fresh suggestions or criticisms that may arise therefrom. I have, &c.,

FREDERICK NOEL-PATON,
Secretary.

No. 2304-S.R.

GOVERNMENT OF INDIA,

FINANCE AND COMMERCE DEPARTMENT,

SIMLA, *the* 14*th April* 1904.

FROM

J. CAMPBELL, ESQ., I.C.S.,

UNDER-SECRETARY TO THE GOVERNMENT OF INDIA,

TO

THE SECRETARY,

THE MILLOWNERS' ASSOCIATION,

BOMBAY.

SIR,

I am directed to acknowledge the receipt of your letter, dated the 6th April 1904, asking for copies of certain papers regarding the short-reeling of yarn. I am to say that your letter will be submitted for the consideration of the Government of India.—I have, &c.,

J. CAMPBELL,
Under-Secretary to the Government of India.

No. 3225-S.R.

GOVERNMENT OF INDIA,

FINANCE AND COMMERCE DEPARTMENT,

SIMLA, *the* 19*th May* 1904.

FROM

E. N. BAKER, ESQ., I.C.S., C.S.I.,

SECRETARY TO THE GOVERNMENT OF INDIA,

TO

THE SECRETARY,

BOMBAY MILLOWNERS' ASSOCIATION.

SIR,

In continuation of my lettter No. 2304, dated the 14th April 1904, I am directed to say that the Government of India are in entire agreement with the Association that no measures should be taken in respect of the short-reeling of yarn until the Government have been placed in possession of a full expression of the views of persons interested in that industry. It will be evident, however, to the Association that this question is one which concerns not merely the manufacturer, but also the trade at large; and it will therefore be necessary that any observations which the former may desire to make should be considered, and if need be, criticised by the recognised representative of the mercantile public, *i.e.*, by the Chamber of Commerce. It will therefore probably save time if your Association will forward any remarks which they may desire to make to the Chamber, in order that they may have the opportunity of submitting them simultaneously with their own observations. Copies of the papers noted in the margin * are accordingly forwarded herewith.

* 1. Resolution in the Finance and Commerce Department, No. 5800-S.R., dated 24th September 1903.

2. Report of the Committee appointed under the above Resolution.

3. Minute of dissent by Mr. Sassoon J. David, the representative of the Bombay Millowners' Association.

4. Letter in this Department, No. 398-S.R., dated 19th January 1904.

2. The Government of India are of opinion that it will be convenient, and calculated to avoid delay, if this course is followed in similar cases in future.—I have, etc.,

E. N. BAKER,
Secretary to the Government of India.

MILLOWNERS' ASSOCIATION,
BOMBAY, *9th June* 1904.

THE SECRETARY TO THE GOVERNMENT OF INDIA,
FINANCE AND COMMERCE DEPARTMENT,
SIMLA.

SIR,

Under the instructions of the Committee of the Bombay Millowners' Association, I have the honour to acknowledge the receipt of your letter No. 3225-S.R. of the 19th May 1904. The Committee note with satisfaction that the Government of India do not intend taking any measures in respect of the short-reeling of yarn until they have been placed in possession of a full expression of the views of representatives interested in that industry.

2. The Committee at present have no further observations to offer or to add to their representative's minute of dissent with which they are in entire accord.

3. I am however to say, in reference to the remarks contained in your letter under acknowledgment, that the observations and criticisms of the Bombay Chamber of Commerce would practically be the observations and criticisms not of those interested in the industry but of those whose interests are by no means reconcilable with those of the Association; the Committee would therefore respectfully submit that the procedure suggested in your letter would be highly unsatisfactory and prejudicial to the interests of the Association. Considering the importance of the proposed legislation to manufacturers, the Committee would respectfully urge that Government may be pleased to favour the Association with an opportunity of expressing its views on the various criticisms and observations obtained by Government before the final adoption of definite measures; and they trust that Government may see its way to accede to their request in this matter. The Committee would also beg to take this opportunity of stating that the information obtained by Government—alluded to in their letter No. 398 of 19th January last, to the effect that Indian hand weavers are not injuriously affected by the practice of short-reeling (regarding the existence of which to any material extent involving legislation, the Committee have much doubt)—is exactly in accordance with prevailing facts, as these buyers know quite well what it is that they are purchasing. To penalize manufacturers by impracticable enactments, and that too on inadequate evidence, is not, in the opinion of the Committee, the object of Government, and they therefore consider that any legislation in the matter is not called for. If, however, the Government of India decide to adopt new measures, the Committee would submit for favourable consideration the statements made by the members of the Association at their last Annual General Meeting (held on 15th April 1904 and reported in the Bombay newspapers of the following day) to the effect that unless the alterations and modifications contained in their representative's minute of dissent are accepted, the procedure recommended by the Committee appointed by Government will be found unworkable in practice and also unsatisfactory to Government as well as to the Mill Industry.—I have, &c.,

C. J. MICHAEL,
Assistant Secretary.

No. 3920-S.R.
GOVERNMENT OF INDIA.
FINANCE AND COMMERCE DEPARTMENT.
SIMLA, *the 18th June* 1904.

FROM
J. CAMPBELL, Esq., I.C.S.,
UNDER-SECRETARY TO THE GOVERNMENT OF INDIA,

TO
THE ASSISTANT SECRETARY,
BOMBAY MILLOWNERS' ASSOCIATION.

SIR,—In continuation of my letter No. 3855-S.R., dated the 16th June 1904, I am directed to say that the Government of India have carefully considered the request preferred

by the Bombay Millowners' Association, that they may be afforded an opportunity of criticizing the replies received by the Government of India to the references which have been made regarding the question of legislating, with the view of preventing the alleged habitual short-reeling of yarns for sale in India by certain spinners. The Government of India are of opinion that this request is inadmissible; and they regret that it cannot be entertained, as it is contrary to the accepted practice followed in dealing with such matters.—I have, &c.,

J. CAMPBELL,
Under-Secretary to the Government of India.

CONFERENCE OF INDIAN CHAMBERS OF COMMERCE.

Short-Reeling of Yarns.

January 1905.

The Hon. Mr. Armstrong, (*Bombay*):—proposed the following resolution:—

"That this Conference, having noted that Government does not intend to enforce the law against Short-Reeling, considers it incumbent on Government to state the steps they propose to take to place imported yarns on the same footing as those made in this country."

He said:—Gentlemen, this is a matter in which I have taken a good deal of interest. I was one of the Committee appointed by Government to advise and report on this question, and I much regret that the recommendations put forward by the Committee are not to be acted upon. The fact that the report has been put aside, has caused already a set-back in this respect in a large town in Southern India; and now that it is known that Government do not intend to take action in the matter the evil will assuredly increase. After the issue of the Report of the Committee, Chambers of Commerce and other bodies were consulted, and Local Governments were also asked for their opinion in the matter. The Bombay Chamber, in their reply, favoured the proposal that Government should prosecute those engaging in the systematic short-reeling of yarns for local consumption, and they suggested that the issue to all mills of a circular, intimating the intention of Government to take such action, would probably have a good effect. Well, gentlemen, I believe that the probability that Government would take action, and that mills systematically short-reeling would be held liable, had a good effect, for the question was being looked into, and efforts were being made to put matters on a proper footing, but now that Government have in effect announced that they will allow the law to be broken without taking action, importers and local spinners, who have adhered to the standard, are put in a worse position than they were before, for the system of short-reeling must spread. I do not propose at this time to discuss the question as to whether consumers are deceived or not by short-reeling, for this is not the point of the resolution now before you, but if they are not, as some contend, where is the necessity for keeping in force, against imported yarns, the provisions of the Merchandise Marks Act, which fix a standard of length. My own feeling, however, is that for all concerned, with such latitude allowed in this country as may be necessary, looking to the peculiar conditions of labor and so forth, a basis for length and weight is best. If a standard is defined and enforced, all will be on the same footing, and the consumer will be at no disadvantage as every thickness of thread is spun, and as yarn is made up in knots and hanks, no one need buy more than he wishes.

The point as to whether it was wise for the Home Government to pass an Act in which the length and weight of a bundle were defined, has, of course, been much argued. Personally, I think it was a wise decision, for I believe that under the provision of the English Act, which fixes a standard, English yarns have obtained a reputation for genuineness all the world over, but the penalty has been a loss of trade in many markets owing to short-reeled importations from elsewhere. But this is not the exact point we have to vote upon to-day. The position in this country is now this, that although there is an Act which defines a standard, there is no intention

on the part of Government to take proceedings if the law is broken, and after this decision individual action in a Mofussil Court is hardly possible. If this be so, gentlemen, should not the provision in the Act fixing a standard be cancelled in common fairness, so that everyone may be free to reel exactly as he wishes. Yarns from other countries should, of course, be put upon the same basis, for it is not right that imported yarns should be subject to close inspection as regards length and weight, when yarns spun in the country for local consumption, competing, as they do, more and more every year with yarns from England, can be made up in any form that suits the spinner best, for this is, and must always be, a serious handicap to English trade. I cannot accept the argument that short-reeled yarns do not affect the volume of the demand for full-length threads. My experience over many years is entirely against this suggestion. The trade in a genuine thread is not absolutely destroyed by a competitive short-reeled yarn, but it can very easily be seriously checked, and to have imported yarns subject to a rather severe test whilst local spinnings are exempt, is protecting the Indian spinner against Lancashire, and such protection will be a serious handicap to the import trade. If a consumer is deceived by a short thread, he will get to know about it in time, no doubt, if the yarn is systematically very short-reeled, but when a thread is only a little shorter than the standard it may take a long time for a consumer to realise this fact, and then, although in the future he may give a little less for it than for a thread he knows to be genuine, he does not reduce his price to the full extent of the deficiency, which is rarely an absolutely fixed shortage, and in this way the spinner of the short yarn reaps an advantage. It has been represented that the Act, if enforced, would be a hardship on the trade generally, but as it would only be enforced against those who systematically short-reel, I cannot follow this argument and I have always held the opinion that if Government decided to enforce the Act, and acted with vigour, two or three prosecutions would stop the evil or would at any rate greatly reduce it, and the local industry, as a whole, as well as the trade in imported yarns, would thereby be much benefited. Since the Government decision in this matter, my Committee has been shown a letter from the home office of a well known firm in this country expressing surprise that the report of the Commission is to be put aside for the present, and pointing out, as I have done, the probable effect of such a decision on British trade, and my Committee has also received a letter from a leading Chamber of Commerce in the United Kingdom on the same subject, which shows that the decision of Government in this matter is viewed at home with disapproval.

Now, gentlemen, what does the resolution we are considering say? It calls on Government to state what steps they propose to take to put imported yarns on the same basis as those made in this country for local consumption. The request is a perfectly reasonable one under the circumstances, and as it will bring out the views of the Home Government and of many Chambers of Commerce in the United Kingdom, it must, I think, be approved by all those interested in importing goods and yarns from England and elsewhere, but let it be clearly understood that I favour a standard, and greatly regret the action of Government in this matter. It is unreasonable, however, that a law which applies to one, should not apply also to the other. It is, as I have shown, in the nature of protection against imported yarns; and this is a position in which I do not think merchants can allow themselves to be put. I commend this resolution to you, therefore, with confidence.

MR. R. P. ASHTON (*Bengal*):—I entirely agree with all that Mr. Armstrong has said, but I disagree with him as to the way in which we should achieve the end which he is so anxious to do. I can lay claim to some expert knowledge of the subject, and if you, gentlemen, will bear with me a few minutes, I will have brought into this room a small model which I have had made, with the help of which I think I can better explain to the Conference what my contention is.

The model having been brought into the room, Mr. Ashton continued.

This is a small reel as you see, it is an apparatus for making up yarn; it is known also as a measure of length. If it is accurate it is very difficult indeed to reel incorrectly. Now, in England, I am told by Mr. Johnson, that there are a lot of incorrect reels. If that is so,

or not, I am unable to say. In England there are very stringent Acts on the subject of Weights and Measures. In India we have no such Acts, but if we had, it seems to my mind that this reel would come under the Weights and Measures Act. This reel is distinctly an instrument for the measurement of length, and in England the Weights and Measures Act of 1878, Clause 25, enacts heavy penalties against anyone using, possessing or making incorrect weights and measures. We have no Weights and Measures Act in India except an extremely exiguous one. I spoke to Mr. Baker the other day on the subject, and he told me that the matter of further legislation had come before Government, but owing to the diversity of weights and measures in use in India, it had been found absolutely impossible to legislate. The result is that if you go about the country, you will find various contrivances for weighing coal, wood and other produce. I have seen pebbles used in the weighing machines in villages. The operative here has absolutely no idea of correct weights. To my mind the correctness of weights and measures is a matter as important to the commerce of the country as the correctness of its coinage, and one which the Government should attend to. The original proposal was to ask Government to legislate in the matter of weights and measures, but this we dropped, and the amendment now suggested is that we should ask Government to ensure that the reels are kept correct. I will now proceed to show you how these reels are falsified. I have had experience of this myself, and I know for a fact of a Mill in India where every reel is incorrect, and it is impossible for the operative with such reels to reel correctly even if he wished.

This reel (*referring to the model*) is driven by a worm-wheel having 80 teeth. Well it is very easy to take that wheel off and put on a 76 teeth wheel, which would not reel more than 76 threads. The circumference of this reel is 54″ or 1½ yards. Whereas in many Mills reels are planed down to a circumference of 52″, and you will find, on examination of the yarn that is sometimes seen in this country, that it could never have been reeled on a 54″ reel.

Mr. Armstrong, Mr. Johnson, and myself all want to arrive at the same end, but they want to attain an eminence which has been achieved in England only after a whole history of effort. In England they have behind them the Weights and Measures Act, and the correctness of reeling is the outcome of a general effort on the part of the community to obtain correctness of weight, whereas in India we have nothing of the kind. I say that if we cannot tackle the general question, let us tackle this special one and have the reel made correctly. If we stick to the question of the correctness of the reels, we at once clear the ground of all doubtful and debatable matter. It has been questioned whether the weaver in India has been deceived by short-reeling or not. The Government has said that the weaver has not been deceived, and so they do not think it necessary to legislate. You might argue the same way about some housewife going to buy a pound of sugar, nevertheless the Government is very careful at Home to see that the grocer keeps his weights and measures correct. Then again, it is said, that the Indian reeler cannot produce correctly reeled yarn, and that the nature of the cotton of this country prevents even the European operative from turning out yarn with accuracy. I admit that argument, but my proposal eliminates this difficulty. We still have the question of accidents which arise. I will show you how an accident occurs. *(Mr. Ashton then showed on the model how when a reeler goes to sleep the yarn is liable to break.)* It is very hard on a Mill Manager to have all his yarn seized by the Customs authorities because some old woman has gone to sleep while reeling.

I will show you another way in which anybody who wants to short-reel can do so. Seven of these threads are reeled off into a hank. At the end of the hank you can lift the swift up and turn the worm-wheel back, and then the last knot will be short-reeled, or you can lift it up at the beginning of the hank so that the first is short-reeled. But the result of that would be seen at once. You could tell whether it was intentional or not, because it will always be the first hank or the seventh hank that will be short-reeled throughout.

I have been through all the 25 pages of matter that the Government has just printed, and among a lot of matter beside the point, which I did not agree with, and a lot of debatable

matter, I came to these words written by Mr. R. Harwood, the Manager of the Delhi Cotton and General Mills Co., which contain a lot of sound sense. This gentleman, whom I have never met and know nothing of, says :—

> "The best way to overcome short-reeling—and, in my opinion, Government ought to put a stop to it—would be for the Factory Inspector to test the reeling machines ; first measure the circumference of swifts, and second see that the worm-wheels had the correct number of teeth ; and if the former is at fault, to warn the manufacturer ; and if the latter, to heavily fine him, as this would mean that he was intentionally short-reeling."

I have long been, and still am, of this opinion.

Dealing with native labour is very like dealing with school boys. You cannot drive them, but you can, by wise arrangements of Mill and Machinery, do much to influence them, and so I say first of all insist on these being in order. It is notorious that these are not in order, and that in many Mills reels are planed down and wheels falsified, so that the operative is encouraged to do the very thing that he should be prevented from doing.

I should like to have said a little more, if there had been time, about the various evils that have grown out of this short-reeling. One of these is the practice that prevails of selling bundles with half knots ; also the spinning of odd and half counts. I do not think we can be surprised that the Manchester Chamber of Commerce is agitating strongly on this point and wishes to move the Secretary of State. Mr. Parsons has shown me a telegram from the Manchester Chamber as follows :—

> "Have to-day written Secretary of State supporting enforcement law against short-reeling yarn in India for home and export."

I am not surprised that the Manchester Chamber has taken this action, and it appears to me that unless we make some effort to put our own house in order, that the Home Government will practically insist upon the Indian Government doing something of the kind. We are all in favour of putting our house in order ; all we disagree about is, how to put it in order. I will use the same illustration that I did to Mr. Johnson yesterday. "You want to get to the top of the steps without taking the first one." I propose now to take the first one. I have great pleasure in proposing an amendment to the Resolution ; it runs as follows :—

> **"That this Conference regrets that Government does not at present intend to stop the abuse of short-reeling and considers that it should take steps to ensure that the reels in Indian Mills are of correct diameter and are furnished with worm-wheels of a correct number of teeth, and that the possession of incorrect reels should be made a punishable offence."**

If, gentlemen, you pass that amendment, you will show Government that you wish to raise the trade of the country up to the English level, but if you pass the resolution that Mr. Armstrong has put before you, you will give the idea both to the Government of India and all our friends at Home that your intention is to lower the standard of England to our own disreputable level.

MR. MARSHALL REID (*Bombay*) :—Unless it is the intention of Government to make the selling of short-reeled yarns a criminal offence, I do not see what advantage we shall get from this proposed amendment. We have been shown how very simple it is to short-reel one's yarns. As Mr. Ashton has explained, you have only to run the reel a few times before you put the threads on, and stop the reel before you come to the end. And if you are allowed to sell the yarn so produced, without in any way being prosecuted for it, I do not see how the amendment will remedy this state of affairs. I really think that we should insist on the resolution being carried out as it is written. I have studied the subject for some time and have a slight knowledge of spinning and reeling of cotton, and this particular point of the starting of the reel and

the stopping of it before it has made 80 revolutions and the tacit permission you have from Government to sell the yarn, so reeled, in the market, seem to do away with any effect this amendment could bring about.

MR. S. M. JOHNSON (*Upper India*) said:—Sir, the first point that suggests itself in connection with the resolution that has been put forward is, are we competent to give a decision on this question which can in any sense, whatever, be considered authoritative; are we qualified to express an opinion on the subject and reasonably expect to obtain the assent of Government to it? The subject is essentially one relating to a process of manufacture and only those persons with some practical knowledge of the subject are, we consider, qualified to give an opinion upon it, and it is those opinions upon which alone ultimate action should be based.

Sir, I think it is unfortunate that owing to the constitution of this Conference, the Mill-Owners' Association of Bombay was unable to send a delegate; as the Association represents a large section of the Indian cotton mill industry, I would venture to hope that means will be found at future Conferences of overcoming this difficulty. It appears to those I have the honor of representing on this subject, and to myself, that on all questions affecting industry, as apart from commerce, the best expert opinion of those engaged in the industry concerned should be our guide in all deliberations affecting it.

Now, gentlemen, we consider there is no need whatever for any further legislation by Government on this matter of reeling, simply because the present law amply provides against fraudulent practices, and if it is suspected that short-reeling prevails at any Mill, all that is required to be done is to set the law in motion. I may say I stand before you as one who speaks with actual personal experience of the subject. Not long after the present law was passed (it was passed in 1901), it was reported to me that certain yarn was selling in our markets under the market price of the day, and that the difference in price was sufficiently large to create a demand for that yarn. I examined a few bundles of the yarn and found there was a very flagrant breach of the law. The Magistrate of the district concerned threatened to put the law in motion: the yarn disappeared; and I believe the Mill in question has been a model of rectitude at all events in that respect ever since.

Gentlemen, I will now ask you to consider the merits of this matter of short-reeling. Short-reeling means or rather, I should say, is intended to mean that a shorter length of yarn is put into the hank in the form in which it is placed on the market than is indicated by the count of the yarn. For example, a bundle of 10 lbs. of No. 10 yarn should contain 84,000 yards: if it actually contains, say, No. 9 yarn, there will only be 75,600 yards—that is called short-reeling. But the term is inaccurate, what is really meant is false spinning. If a mill spins No. 10 yarn but reels it on a reel of less than the standard diameter, it cannot get the standard weight of 10 lbs.: it can only be by false spinning, that is spinning a coarser count than 10s, that short-reeling arises.

A Committee was appointed last year by the Government of India to consider this question, and it met at Bombay. Its conclusions and recommendations were directed mainly to defining what range of variation was permissible in the spinning of cotton yarn: the Committee recommended a variation of a quarter count for yarn below 16s, and half a count for other yarns. Those variations were not approved by spinners, simply because it is not possible anywhere in the world to spin absolutely true to count, and in India, as you all know, difficulties met with abroad are always aggravated by the nature of the climate and the quality of the labour we have to depend upon. The Government of India have resolved to take no further action, at all events at present, in the matter of short-reeling, and it is because of this decision that the resolution and the amendment now on the agenda have come before you.

Gentlemen, the Upper India Chamber of Commerce cordially endorses that resolution. We say there is no necessity for further legislation; fraudulent practices are already provided for, and it is for aggrieved parties to put the law in motion whenever and wherever necessary.

I invite you, gentlemen, to look at the matter from a practical point of view. What is the overpowering inducement that would lead a Cotton Mill to systematically and intentionally put false yarn on the Market? Put aside for the moment any consideration of the risk it runs of a criminal prosecution, the risk of losing its customers and ruining its mark, and consider only what the gain is in hard cash. The difference in price between one count and another is about 1 anna for an 11lbs. bundle, so that the highest possible gain to a Millowner is one pie a pound on the one hand to set against very serious risks on the other.

Gentlemen, Millowners in India have at the present time to tolerate domiciliary visits from quite a number of people. The Civil Surgeon, the Magistrate of the District, the Factory Inspector, and the Boiler Inspector, can come into our Mill at any time and investigate and examine to their hearts' content. We do not wish to have any further names added to the list.

There is a reference in the original resolution to imported yarns, gentlemen, the law applicable to yarns made in India are applicable to imported yarn also, and it is for aggrieved parties with those yarns or with local yarns to put the law in motion, if that is required to be done.

For all these reasons, gentlemen, the Upper India Chamber of Commerce withholds its support to either the original resolution or to the amendment.

MR. H. S. ASHTON (*Bengal*) :—With regard to the question of the inducement to Millowners to short-reel in the way which has been described, I should like to tell the delegates what would be the effect in a Mill in which I am interested. Calculating on the basis of 1 pie per pound, the gain in our Mill at the present time would be about Rs. 1,500 a month, or Rs. 18,000 a year.

The HON. MR. ARMSTRONG (*Bombay*) :—Of course, Sir, this question is an extremely difficult one. I am very glad indeed that the Bengal Chamber is at one with Bombay in their wish to put matters on a sound and honest footing. I am very sorry that the Upper India Chamber are unable to look at the matter in the same light. There have been various points raised, and one is that if short-reeling is practised in Mills, why not put the law in motion and get matters set right. This point has already been considered, and we know perfectly well, all of us, what putting the law in motion in a Mofussil Court is. This is a highly technical matter, and I don't think you can blame the man who tries the suit, since he has not the right sort of experience in such matters. I may say that, with regard to this resolution which the Bombay Chamber has put on the paper, I do not think it is the sort of resolution we exactly require. I have not the file of papers here, but am under the impression that, when we drafted our first resolution, it was in the form of a request to Government to carry out the report of the Committee, which Government had appointed during the year before last. When we saw early in December that Government did not intend to take action in the matter, we altered our resolution to the form in which it is now before you, and our object in doing so was not to bring Lancashire yarn down to the level of the short spun yarn of this country, but simply that the whole question might be thrashed out, and that all the Chambers might have their say on this very important point. We felt that the pressure which would be put upon the Government of India would be sufficient to carry the matter right through. Our resolution has been somewhat criticised, but I wish to explain that there was a particular reason for the form in which it has been put. We should have preferred to have advanced a straightforward resolution to the effect that Government should carry out the recommendation made by the Commission appointed by Government, but as the latter had decided not to do anything at all, we resolved to put the matter in another light and felt sure that the end would be attained.

We come now to the question which has been raised by the Bengal Chamber as to the inspection of machinery. It is a difficult question. The Bombay Chamber has never approved of the inspection of machinery for many reasons. I am not authorised to speak on behalf of the

Millowners, but I believe that they would strongly object to anything of this kind. I do not agree with Mr. Johnson that this question must be settled from the point of view of those who manufacture, but rather from the point of view of those who consume. When the question of the inspection of machinery was brought up before the Commission appointed by Government, I do not think it received the support of any of us. I can quote from a letter that a certain Mill in Southern India, which has for a very long time been short-reeling, openly admitted it, and intended to go on short-reeling until Government stopped it. It seems to me a most unsatisfactory admission. I am told that since this decision of Government other Mills in Southern India have been asked to spin 19s. As has been pointed out, the saving which is effected by spinning a coarser yarn does not sound very much, but it comes to a very considerable sum when you calculate the amount that can be made in a month and in twelve months.

I hope very much that we shall be able to come to some decision on this point, since the only difference appears to be the method of procedure. We have always objected to the inspection of machinery, and think it would be better if the Government acted upon the report of the Commission. The Commission has taken altogether a very lenient view of this matter, and has allowed for certain variations which would enable Indian spun yarns to be put on a proper footing. In the regulations relating to English yarns, variations have likewise been allowed, provided the average count of the bundle is correct. It does not authorize any Government official or Inspector to go into a Mill and inspect the machinery. The official appointed by Government would have to satisfy himself first that short-reeled yarn was being offered for sale by a Mill for consumption locally. After he had convinced himself of this, he can lay a complaint in a Court having jurisdiction, obtain a warrant, and take away samples for test. You will see that the Inspector cannot walk straight into a Mill and seize a certain number of bundles. He has first to satisfy himself that short-reeling is being practised in that particular Mill, and then go before a Court having jurisdiction, and convince that Court that the information on which he desires to take action is correct, and then, if the Magistrate is convinced on this point, he issues a warrant, and the Inspector proceeds to the Mill, from where he takes samples, which are transmitted to a Presidency town for the purpose of a first test. The Mill is given notice that a test is to be held, and is, of course, invited to be present at the test. It seems to me that the Commission have taken a reasonable view of the whole situation, and have allowed liberally for variations. They have not allowed Inspectors to walk into a Mill in order to inspect machinery or seize yarn; everything has to be done in a straightforward manner. The Magistrate must be convinced; the Mill is given notice of the test to be made; every hank in the bundle is tested; and if the count is found to be short, the Mill is given notice that a second test will be made. I cannot imagine anything fairer or more reasonable than that. It does not seem to me that we shall be able to agree, but I think we should be perfectly willing to cancel this resolution of ours and substitute for it a recommedation to Government that the advice of the Commission should be carried out. That was the original idea of the Bombay Chamber.

MR. R. P. ASHTON (*Bengal*):—With your permission, Sir, I will reply to what the two last speakers have said. In the first place Mr. Johnson has said that we are discussing the question of manufacturing. There I beg to differ from him. The yarn has been manufactured: we are not discussing the question of manufacture, but the question of the measuring of the manufactured yarn. The next point is that of the saving to a mill. Mr. Johnson has shown you the difference between the value of a count of 9s. and a count of 10s. Mr. Hubert Ashton disagrees with him as to the actual gain to the Mill, but I will not touch on that point. What I wish to affirm is that if you are enabled, by the falsification of reels in your Mills, to habitually spin lower counts, you are also enabled to buy inferior cotton. That is where the saving comes in. You also get much better work in your Mill. Having been a Manager and acted as a Spinning Master before that, I think I may say I know all about it. If your counts are a little fine, your spinning is bad and your outturn becomes worse; if they are a little coarse you spin well and get your weight. The spinner is satisfied because he gets good wages;

the Spinning Master is satisfied, because he gets his bonus; and the Manager is satisfied, because his Agents and Proprietors compliment him on his excellent outturn; therefore, the temptation to spin coarse is very great, as Mr. Johnson will admit. No doubt, coarse spinning is at the root of the desire to short-reel. If by cutting down the swift and taking a certain number of teeth out of the worm-wheel a Manager is able to spin 10 per cent. coarser, *i.e.*, by eliminating 10 per cent. of length in his bundle, he is able to spin coarser, he can spin 9s instead of 10s, 18s instead of 20s, and can make inferior cotton spin very much better. Therefore, the temptation is very much greater than the one anna, or whatever it is, that he gains in the difference between counts.

The next point that Mr. Johnson told us was that it did not matter what size a reel was. There I absolutely disagree with him. There are two systems of reeling known in the market—one is the hank where you reel by lees and hanks, and the other is cross-reeling which we are not discussing. I will, therefore, confine myself to the question of reeling by lees and hanks. Any elementary book will tell you that there are 54 inches in the thread, and 120 yards in a lee, and 7 lees in a hank, just as there are 16 oz. in a lb. and 112 lbs. in a cwt. Why should we divert from that system in any way whatever? Mr. Johnson asks how it is that if a spinner habitually short-reels, he is able to make up his weight, unless he spins coarse. He does spin coarse, but there is this other abuse which has sprung up, *viz.*, that of putting in a small knot weighing 4 oz. in the middle of the bundle. This is particularly done in yarn for China. In a letter which a Hongkong friend of mine wrote on the subject he said: that we must make up our yarn in that way or he could not sell it for us. This small knot in the middle of the bundle is termed a "squeeze," that is the Chinese name for it. The dealer when he sells the bundle pulls it out and has a short-weight bundle, and this little bit of yarn is his commission. That then is how weight is made up, partly by spinning coarse and partly in those cases by putting extra weight in. It can be done sometimes by excessive damping, by putting on heavy string and very heavy paper. Now my reason for urging this method is that you eliminate all argument. It is a very difficult thing to correctly measure yarn after it has once been reeled; it is a most troublesome process. I measure this yarn off (*Mr. Ashton here manipulated the model reel*) with the greatest ease by actuating this reel, but if I take these off, the whole yarn would be removed, and you would have great trouble to measure it.

Mr. Armstrong has said that we do not like inspection of our machinery. I absolutely agree with him. No one dislikes the Factory Inspectors more than I do. I have never had any useful help from any Factory Inspector either in this country or in the old country. But I do not think it is a question of machinery. It is a question of weights and measures. Take for instance the inspection of steam boilers. The Boiler Inspector comes to inspect your boiler and says it is not fit to carry 120 lbs. but only 100. That is a matter for argument—one man may say it is quite safe for 120 lbs., while the Inspector says he will not pass it for more than 100. There are, however, ways of getting it passed, but you have to be on good terms with the Inspector. Whereas in this matter it is not a question of argument but of absolute fact. I think that in Mr. Johnson's splendid Mills the reels are in an entirely different building from the machinery. They form, as it were, a part of the Warehouse equipment, not of the manufacturing part of the Mill. As I have said, at home the inspection of weights and measures is very welcome. Why should we fear the inspection of this small proportion of our own weights and measures. I do not fear it, Mr. Johnson does not fear it; therefore, I say to Mr. Armstrong, I would like you to remove your objection to the inspection. Mr. Johnson does not fear it; he knows his reels are correct: I know my reels are correct; I do not fear it.

The Hon. Mr. Armstrong:—You see the difficulty the Commission had was the distinction between yarn made for local consumption and that for export. It has been considered advisable for many reasons that yarn made for export should not be interfered with. There is no Merchandise Marks Act in China, and that is where the difficulty comes in.

Mr. R. P. Ashton:—I entirely disagree with that opinion that you may defraud China, but you must not defraud people in India. For example you prepare a lot of yarn for shipment

to China, which you are unable to ship without taking out war risks, which you cannot afford to do. What are you going to do with the yarn? You cannot sell it in this country. It would be ridiculous for Mills to submit to such a proposal. I think the very idea is vicious in the extreme. As I have said in my speech, it is a question which is akin to the correctness of the coinage. I hope that in this very important matter we may be able to agree in some way or another, though apparently we are not going to agree either on my amendment or on Mr. Armstrong's proposal. You might record that this Conference regrets that Government does not intend to enforce the law against short-reeling, that is the first clause of my amendment.

The Hon. Mr. Webb (*Karachi*):—May I suggest that the Bengal and Bombay Chambers meet in Sub-Committee, and see if they cannot come to some unanimous decision. Speaking on behalf of the Karachi Chamber, the merchants of Karachi very strongly object to short-reeling of any kind or description. There is a strong feeling that Government should legislate, and the only matter upon which there is a difference of opinion is how the legislation should be framed. From what I have heard in the debates, I think there is no likelihood of our coming to a settlement in debate. I think it very likely that an agreement might be arrived at if the Bengal and Bombay Chambers would meet in Sub-Committee, and endeavour to draw up a resolution to which we might all agree. We are all very anxious for legislation which will prevent the fraudulent reeling of yarn, and all that we need now is a resolution which will meet the views of the Bengal and Bombay Chambers. For that reason I would suggest that Bengal and Bombay meet in Sub-Committee to frame such a resolution.

Mr. Simson (*Coconada*):—I am somewhat puzzled by the wording of the original resolution. It is prefaced with a statement that Government does not intend to enforce the law against short-reeling. Surely, if, as the Hon. Mr. Armstrong has told us is the case, such a law already exists, it is self-stultifying on the part of Government to have enacted the measure and then to refuse to put it into operation. Even presuming that they elect to adopt such a course, I take it that a Court of Law would be bound to administer the Act on a plaint being filed by a private person. I am strongly in favour of putting a stop to short-reeling if it be possible to do so, and I, therefore, give my hearty support to the amendment proposed by Mr. Ashton.

At the suggestion of the President, the discussion was then adjourned to enable the Delegates of the Bombay, Bengal and Upper India Chambers to meet with a view to the formulation of a resolution acceptable to all interested.

SECOND DAY.—WEDNESDAY, 4TH JANUARY 1905.

On the Conference resuming after luncheon the question of the Short-Reeling of Yarns was further discussed. Regarding it the President said:—Gentlemen, I understand that you have succeeded in agreeing to a resolution on this question which you hope all the Chambers will be able to accept. If so, I shall be glad if it is handed in—

Mr. MacCaw (*Bengal*):—I beg to propose the following resolution:—

That the Conference would call the attention of Government to the practice of the short-reeling of yarns in India for local consumption, and would request that steps may be taken to put a stop to this objectionable practice.

When we adjourned for lunch it seemed very much as if we had arrived at a dead-lock. We were all agreed as to the condemnation of the practice of short-reeling of yarns, and it would indeed be a pity if we did not succeed in putting forward a resolution. The matter has been discussed by both sides and this resolution will, I trust, be unanimously accepted.

The President:—I take it that Mr. Armstrong's resolution and Mr. Ashton's amendment are, therefore, withdrawn.

Mr. J. M. Dick (*Bengal*):—If it is competent for me to do so, I would move an amendment to the resolution now before the meeting, *viz.*—

"That this Conference pass on to the next item of business."

My reasons for suggesting this are more general than particular, but as regards the special question before the meeting, there already exists an Act under which any person defrauded by short-reeled yarn can obtain a remedy. The fact that to do so is no doubt troublesome and expensive need not worry us. My experience is that any process at law partakes of this nature. But Sir, generally, I wish to warn this Conference against seeking legislation by Government in connection with every little transaction of mercantile life. It is a mistake. The less legislation we have in connection with commerce the better. Let any party who deems himself defrauded, seek his remedy in the common law of the land. If he does not succeed he has at least gained experience, and is not likely to be deceived in the same way again. In spite of what has been said here about the facility of turning out short-reeled or short-weight yarns, I agree with Mr. Johnson that it does not and will not pay. Frauds are not only possible with yarn. With any article of commerce fraud is possible. Why then legislate for yarn? I hold it absolutely true that in business, honesty is the best policy, and that it pays always to be honest and never to be the reverse. In my view—whether as the result of pressure or not—there has been far too much legislation in connection with commercial matters, most notably at home. Take for example the mass of shipping enactments under which British shipowners are labouring: why it is making their trade at a profit almost impossible—as compared with that of other countries. Out of the few items in the programme which have already been discussed, most of them are appealing to Government for legislation. With some of them (two at least) I entirely disagree that any legislation is wanted at all. And, perhaps in years to come our successors will be appealing to Government to rescind legislation in the same way as it is probable this Conference will, according to the programme, be complaining of laws enacted by an earlier generation.

Sir, in season and out of season, I have urged the impropriety of this constantly seeking legislation for protection in matters, when we can easily protect ourselves, and in the instance dealt with by the proposal now before the Conference, I repeat this appeal.

The HON. MR. ARMSTRONG (*Bombay*):—I would like to say in connection with the amendment just proposed, that Mr. Dick does not understand the question. We do not ask Government to legislate. We only ask Government to take action in connection with the legislation which already exists.

The PRESIDENT put Mr. Dick's amendment to the meeting. Nobody having voted for it, MR. MCCAW's Resolution was put to the meeting with the word "reprehensible" being, at the request of the mover, substituted for "objectionable." It was carried unanimously; and with the alteration, reads as follows:—

That the Conference would call the attention of Government to the practice of the short-reeling of yarns in India for local consumption, and would request that steps may be taken to put a stop to this reprehensible practice.

No. 8563 OF 1904.

REVENUE DEPARTMENT,
BOMBAY CASTLE, *4th November* 1904.

To

THE SECRETARY,
MILLOWNERS' ASSOCIATION, BOMBAY.

SIR,

With reference to the correspondence ending with the letter from the Government of India, Finance and Commerce Department, No. 5440-S.R., dated 4th September 1903, on the subject of the proposed legislation to check the fraudulent short-reeling of yarn in Indian mill for sale in India, I am directed to say that the Government of India have decided not to take any further action in the matter at present.—I have, &c.,

G. W. HATCH,
Acting Under-Secretary to Government.

Appendix I.

Representation of the Association on the Board of the Victoria Jubilee Technical Institute.

MILLOWNERS' ASSOCIATION,
BOMBAY, 19*th November* 1904.

THE HONORARY SECRETARY,
VICTORIA JUBILEE TECHNICAL INSTITUTE,
BYCULLA, BOMBAY.

DEAR SIR,

Under the instructions of the Committee of the Bombay Millowners' Association, I have the honour to inform you that Mr. Bomonji Dinshaw Petit, the Association's representative on the Board of the Victoria Jubilee Technical Institute, has owing to continued ill health asked for leave of absence for a period of 6 months from the meetings of the Board.

I am to beg therefore that the Institute may be pleased to sanction this leave, and I am also to add that the Committee have pleasure in nominating Mr. Jehangir Bomonji Petit to act as a member of the Board during Mr. Bomonji's absence.

Yours faithfully,
C. J. MICHAEL,
Asstt. Secretary.

VICTORIA JUBILEE TECHNICAL INSTITUTE,
BYCULLA, BOMBAY, 23*rd January* 1905.

No. 595.

FROM
N. A. F. MOOS, ESQ., B.SC., F. R. S. E.,
HONORARY SECRETARY,

TO
THE SECRETARY,
BOMBAY MILLOWNERS' ASSOCIATION.

DEAR SIR,

I am desired by the Board of this Institute, with reference to your letter of the 19th November 1904 to forward to you the accompanying true copy of a letter from Government on the subject of the nomination of an Acting Representative.

Yours faithfully,
N. A. F. MOOS,
Hon. Secretary.

True Copy.

No. 2377 OF 1904.

EDUCATIONAL DEPARTMENT,
BOMBAY CASTLE, 21*st December* 1904.

FROM
THE SECRETARY TO GOVERNMENT, EDUCATIONAL DEPARTMENT,
BOMBAY,

TO
THE HONORARY SECRETARY TO THE BOARD OF THE
VICTORIA JUBILEE TECHNICAL INSTITUTE.

SIR,

With reference to your letter No. 501, dated the 6th instant, I am directed to invite your attention to No. 9 of the Rules of the Victoria Jubilee Technical Institute and to state that

if the Board of the Institute has granted leave of absence to Mr. Bomanji Dinshaw Petit, he does not cease to be a Trustee and there is, therefore, no vacancy to which Mr. Jehangir B. Petit can be appointed.

I have the honor to be,
Sir,
Your most obedient servant,

(Sd.) J. SLADEN,
Secretary to Government.

MILLOWNERS' ASSOCIATION,
BOMBAY, 20*th February* 1905.

THE HONORARY SECRETARY,
VICTORIA JUBILEE TECHNICAL INSTITUTE,
BOMBAY.

DEAR SIR,

I am directed by the Committee of the Bombay Millowners' Association to acknowledge the receipt of your letter No. 595, dated 23rd January 1905, with which is enclosed a copy of one from Government of Bombay (Educational) dated 21st December last.

2. The representative of the Association on the Board of your Institute holds office subject to the rules forwarded to you under letter, dated 2nd August 1902, and recognised by your Board, after some correspondence, on the 23rd January 1903. In the correspondence and at the Conference which intervened between those two dates it was explained that the Committee considered it necessary to provide for effective and continuous representation on the Board, and believed that the consent of the Members of the Association to any renewal of the grant hitherto made by them might be found to be contingent on such continuous representation.

3. No. 5 of the Rules in question reads :—" .....in the event of the Association's " representative applying for leave of absence, the Committee may, if they think fit and with " the consent of the Board of the said Institute, appoint a substitute who shall hold office until " etc. etc. "

4. It is true that in the case now under discussion the Committee thought themselves entitled to take the consent of the Board for granted ; and the fact that such consent existed is marked by the circumstance that the name of the substitute was duly communicated by you to Government. The objection therefore proceeds from Government and is of the nature of a repudiation of the Rules made by this Association under sanction of your letter of 23rd January 1903. It had always been assumed that any steps that might be necessary for procuring the recognition of those Rules by Government and for the avoidance of such a situation as has now arisen had been taken by you some two years ago.

5. I am to beg that you will now make to Government such representations as may procure the recognition of the said Rules. In the opinion of my Committee the Rule 9 quoted by Government relates solely to the cessation of a Trustee's appointment, which is not now in question. It has no bearing upon the making of an acting appointment ; and the circumstance that the Rules of the Institute do not at present contain any provision for such appointments would, in the opinion of the Committee, be probably not recognised by the body of members as justifying any waiver of that desire for continuous representation on the Board which has been increasingly regarded as a condition of the Association's contribution to the funds of the Institute. It is hoped that you will be able to obtain from Government an express recognition of the Rules made by this Association in this behalf ; and I am to suggest that the matter may be treated as urgent, seeing that the Annual General Meeting of the Association takes place shortly, and that it may then become necessary for the Committee to justify any proposal they might be prepared to make to the general body of members regarding further contribution to the funds of the Institute.

6. The Committee are aware that the need for appointing a substitute in the room of Mr. Bomonji Dinshaw Petit has lapsed through his resumption of his seat on the Board ; but they think it necessary that the matter should now be put on a sound basis with a view to the possible occurrence of similar cases in the future.

Yours faithfully,

FREDERICK NOEL-PATON,
Secretary.

MILLOWNERS' ASSOCIATION,
BOMBAY, 2*nd August* 1902.

THE HONORARY SECRETARY,
VICTORIA JUBILEE TECHNICAL INSTITUTE,
BOMBAY.

DEAR SIR,

I am directed by the Committee of the Bombay Millowners' Association to forward to you, for favour of any remarks your Board may desire to offer, rules for regulating the representation of the Association on the said Board which have been approved by the Committee, and which will be submitted for adoption at the next General Meeting of the Association.—I am, &c.

FREDERICK NOEL-PATON,
Secretary.

BOMBAY MILLOWNERS' ASSOCIATION.

Rules for the election of a representative of the Bombay Millowners' Association on the Board of the Victoria Jubilee Technical Institute.

1. Any member of the Association shall be eligible as Representative of the Association on the Board of the Victoria Jubilee Technical Institute.

2. The period of office of any elected representative of the Association on the Board of the said Institute shall be one of three years. At the end of such period he shall retire but may be re-elected.

3. The appointment of the Association's representative shall be made at a General Meeting of the Association, and such representative shall *ex-officio* be a member of the Committee of the Association.

4. In the event of the disqualification of the Association's Representative under section 9 or 10 of the Rules and Regulations of the said Institute, or in the event of the decease or resignation of such representative, or in event of his ceasing for any reason to be a member of the Association, the Committee shall appoint a successor, who shall hold office up to that date at which the representative whom he succeeds would under Rule 2 have retired.

5. In the event of the absence of the Association's representative from three or more consecutive meetings of the Board, or in the event of the Association's representative applying for leave of absence, the Committee may, if they think fit and with the consent of the Board of the said Institute, appoint a substitute, who shall hold office until the representative whom he replaces resumes attendance, or up to that date at which the representative whom he replaces would under Rule 2 have retired.

FREDERICK NOEL-PATON,
Secretary.

BOMBAY, 22*nd September* 1902.

FROM

N. A. F. MOOS, ESQ., B.Sc., F.R.S.E.,
HONORARY SECRETARY,

To

THE SECRETARY,
MILLOWNERS' ASSOCIATION, BOMBAY.

DEAR SIR,

Referring to your letter, dated the 2nd August last, which was duly placed before the Board, I have the honour to state that while the Board are unwilling to interfere in the rights of election of bodies entitled to send Trustees on the Board of this Institute, as their opinion is requested, they venture to state that there should be no widely divergent features ruling the nomination of Trustees on the Board. The nominees of Government are for life or at the pleasure of Government; the representatives of the Bombay Municipality are for life; the Trustees of the Ripon Memorial are for life; the Trustees of the Sir J. J. Fund are for life; and up to now your representatives have also been for life. The Board, therefore, do not think that any good purpose will be served by a departure such as the one suggested by the Association. The suggestion to shorten the period to three years will, the Board venture to think, only result in rapid changes in the personnel of the Board, which for obvious reasons will not be to the interests of the Institute. It will not only prevent influential and business men from joining the Board, but will take away men who have so joined and acquired the requisite knowledge and information of the affairs of the Institute as soon as they have been conversant with them.

2. In regard to the prohibitive rule the operation of which bars a Trustee from holding office, it is clearly pointed out in Rule 9 of the Rules and Regulations of the Institute that the Board can only take cognisance of the absence of a Trustee if he is absent at 12 consecutive meetings of the Board.

3. The Board therefore are of opinion that no change is desirable or necessary, particularly when such change departs from the rules of the Institute; but that while not wishing to interfere in any way in the enactment of rules by your Association, I am to state that the Board are unwilling to depart from their own which have given every satisfaction in the past working of the Institute.—Yours faithfully.

N. A. F. MOOS,
Honorary Secretary.

MILLOWNERS' ASSOCIATION,
BOMBAY, *9th December* 1902.

N. A. F. MOOS, ESQ., B.Sc., F.R.S.E.,
HONORARY SECRETARY,
VICTORIA JUBILEE TECHNICAL INSTITUTE,
BOMBAY.

SIR,

Your letter of the 22nd September last, in which you stated the opinion of your Board regarding the proposed Rules to regulate the representation of this Association on that body, has had the careful consideration of my Committee, who direct me to say that your letter under reply appears to indicate some misapprehension as to the purpose and effect of the said rules.

2. To remove any misgivings as to the prospect of frequent changes in the representation of the Association, it is sufficient to point that under No. 3 of the proposed rules the appointment is to be made at a General Meeting, and that members of the Association would not attend a General Meeting for such a purpose unless some very cogent reason existed. It is, moreover, as little to the interest of the Association as to that of the Board to replace unnecessarily a representative who has become acquainted with the business of the Institute.

3. I am to explain that the absence of any rules to govern the Association's representation on your Board has long been recognised as a defect, and that the object had in view in drafting the rules forwarded to you has been to provide for effective representation under circumstances that might easily arise. It is recognised that the Association could not at all times count upon the advantage of being represented by a gentleman of the diligence and public spirit that characterise their present representative, and that the absence of their representative from the meetings of your Board for a series of months might, in some contingencies, be a serious disadvantage. They conceive that the more effective their representation may be, the better the purposes of the Institute are likely to be served, and the greater will be the disposition of the members of the Association to continue the present annual contribution to its funds.

4. It is understood that your Board do not claim any right to veto such rules as the Association might adopt for the purpose stated, but that they would prefer that the representative of the Association should hold office for life as in the case of the representative of the Ripon Memorial Fund. But my Committee submit that, while in respect of the representative of the Ripon Memorial, it is expressly laid down under Rule 5 that the tenure of office shall be for life, and under Rule 7 that the Government nominees shall hold office during the pleasure of Government, the absence of any similar provision in respect of this Association and the other bodies named by you indicates that all these bodies are advisedly given discretion as to the period for which they elect a representative. In their view Nos. 9 and 10 of the Rules and Regulations of your Institute reciting the various disqualifications for a seat on the Board merely guard the Board on its side from any obligation to accept or retain an unsuitable member, elected or otherwise.

5. My Committee hope therefore that your Board will on reconsideration recognise that the proposed Rules of the Association will not have the effect they at first anticipated, and are not in any way inconsistent with the Rules of your Institute which were kept fully in view at the time of drafting.—I have, &c.

FREDERICK NOEL-PATON,
Secretary.

VICTORIA JUBILEE TECHNICAL INSTITUTE,
BYCULLA, BOMBAY, 23*rd January* 1903.

FROM

N. A. F. MOOS, ESQ., B.Sc., F.R.S.E.,
HONORARY SECRETARY,

To

THE SECRETARY,
BOMBAY MILLOWNERS' ASSOCIATION,
BOMBAY.

DEAR SIR,

Your letter of the 9th December was duly placed before the Board of this Institute at their meeting held yesterday evening, and I am to say that it is open to the Association to make what rules they think desirable in the matter of their representation on the Board of the Institute. Yours faithfully, &c.

N. A. F. MOOS,
Honorary Secretary,

Appendix J.

Yarn Rates of Freight to China.

BOMBAY, *December* 1*st*, 1904.

THE SECRETARY,
MILLOWNERS' ASSOCIATION,
BOMBAY.

DEAR SIR,

Yarn Rates of Freight to China.

As you are aware the rates on Indian yarn to the Straits and China have, since the earlier part of last year, been at an exceedingly low figure, the reduction having then been agreed to by us with the view of meeting the depression in trade of which the Millowners complained.

Rates of freight to all Western Ports are now on a higher basis than they have been for some time, and this, in conjunction with the additional risk now involved in sending steamers to the Far Eastern Ports, has compelled us to ask for a better return for the regular services rendered, and in order that your buisness may be affected in the least possible degree, we have agreed, as will be seen from the accompanying memorandum, on a most moderate increase of freight.

The increases will come into effect on and after the 1st January 1905.

We are, Dear Sirs,
Yours faithfully,
P. & O. S. N. COMPANY.
AUSTRIAN LLOYDS S. N. Co.
RUBATTINO S. N. COMPANY.
NIPPON YUSEN KAISHA.

NOTICE.

BOMBAY TO CHINA AND JAPAN.

Until further notice, the Rates of Freight on bale goods to China by steamers sailing on and after 1st January 1905 will be as follows:—

Twist Cotton, Wool and Indian Piece Goods—

To Straits and Hongkong per ton of 40 cubic feet ... ... Rs. 14

To Shanghai „ „ „ „ „ ... ... „ 18

Wool, Twist and Indian Piece Goods—

To Japan, per ton of 40 cubic feet ... ... Rs. 18

with a rebate of 25% on the Freight to Firms confining all their shipments for the Straits, China and Japan exclusively to the steamers of the undermentioned Companies:—

P. & O. S. N. Co.
AUSTRIAN LLOYDS S. N. Co.
NAVIGAZIONE GENERALE Co.
NIPPON YUSEN KAISHA.

BOMBAY, 1*st December* 1904.

MILLOWNERS' ASSOCIATION,
BOMBAY, 6*th December* 1904.

THE SUPERINTENDENT, P. & O. S. N. COMPANY,
THE AGENT, AUSTRIAN LLOYDS S. N. COMPANY,
THE AGENT, RUBATTINO S. N. COMPANY,
THE AGENT, NIPPON YUSEN KAISHA.

GENTLEMEN,

Yarn Rates of Freight to China.

I am directed by the Committee of the Bombay Millowners' Association to acknowledge the receipt of your letter and notice of the 1st instant, in which it is intimated that on and after the 1st January next Rates of Freight on Bale goods to the Further East will be increased.

2. The reasons assigned for the proposed enhancement are (*a*) that rates of Freight to all the Western Ports are now higher than they have been for some time, (*b*) that shipment to the Further East at present involves abnormal risk.

3. With regard to the first of these reasons, I am to say that it is in no way borne out by the information procurable from any other sources. Quotations received indicate on the contrary that forward rates for Western Ports are lower than those that have been ruling for the past four months.

4. With regard to the second reason I am to represent to you that such additional risk as attends the conditions now existing in Eastern waters directly affects the cargo quite as much as the ship. If the Shipowner may lose his ship, so may the Shipper lose his goods. It is therefore not equitable that a Shipowner should ask his Shipper to indemnify him from a risk which both ought to share *pro rata* of their respective interests.

5. Moreover, the degree of risk depends very largely on the manner in which the Shipping Company conducts its business, and the thoroughness with which it discards cargo that may be regarded by either belligerent as contraband of war. The shipper has no power to influence the Shipowner in this matter. The Shipowner has absolute power to determine what degree of risk shall be borne by the merchant in common with himself. So on this account also it would be inequitable that merchants should be called upon to compensate the Shipowner for his share of a risk which he alone can by his own acts increase or diminish.

6. The trade has to bear its own risk and to meet from its margin additional insurance charges in respect of that risk. My Committee think you will recognise that Shippers ought not to be asked to bear also the risk proper to the carrying trade. I remain, &c.

FREDERICK NOEL PATON,
Secretary.

Appendix K.

Cotton Cultivation—Selection and Distribution of Seed Suitable for Sowing.

No. 8568-A OF 1904.

REVENUE DEPARTMENT,
BOMBAY CASTLE, 4*th November* 1904.

To

THE SECRETARY,
MILLOWNERS' ASSOCIATION,
BOMBAY.

SIR,

With reference to Government letter No. 6507, dated 27th August 1895, I am directed to forward, for the information of the Association, a copy of a letter from the Government of India

No. 23-9-36, dated 16th September 1904, on the subject of the improvement and extension of cotton cultivation in India, and to request that you will be so good as to favour the Director of Land Records and Agriculture with the opinion of the Association on the suggestions made by that Government. I have, &c.,

G. W. HATCH,
Acting Under-Secretary to Government.

No. 23—9-36.

FROM

J. WILSON, ESQ., C.S.I.,

SECRETARY TO THE GOVERNMENT OF INDIA,

To

Dept. of Rev. and Agriculture.
Economic Products.

SIMLA, *the 16th September* 1904.

SIR,

I am directed to address you on the subject of the improvement and extension of cotton cultivation in India. The question of the production of cotton has, as the Local Government is aware, been exciting much public attention of late owing to the general shortness of the world's supply compared with the demand. In the United Kingdom an Association has been formed for the promotion of cotton cultivation within the limits of the British Empire, and the importance of improving the Indian supply has been pressed upon the Secretary of State by the Association and by the representatives of the textile interest in Lancashire. In communicating these representations to the Government of India the Secretary of State has intimated that he regards the matter as one which may prove to be of great importance to India, and to its external trade, and has desired that it should receive most careful consideration. The Government of India are conscious that the problem is largely a commercial one, that is, that cotton cultivation will expand only if cotton is made more profitable to cultivators than other crops, and that the longer or finer staples will be grown only if they prove more profitable than short staples, for which there is already a very large foreign demand. There are, however, many directions in which Government can be of assistance, and seeing that cotton takes a foremost place in the export trade of India, His Excellency the Governor-General in Council considers that no effort should be spared towards helping the cultivator to secure the exceptional opportunity now offered for the further profitable development of an important Indian industry.

2. The measures which the State can usefully take for the assistance of the cultivator are those which involve scientific research and organized effort, and may be classed under the following heads :—

(1) The botanical examination and classification of all existing varieties of cotton, both wild and cultivated.

(2) The introduction of better varieties and improved methods of cultivation.

(3) The provision and distribution of good seed of the varieties ordinarily grown.

Under the first two heads much has been and is being done. A botanical survey of Indian cottons commenced several years ago is now being pushed on systematically by the Reporter on Economic Products, acting in conjunction with the Director of the Botanical Survey. The primary object of this enquiry is the identification of the numerous varieties of cotton in order to set at rest the doubts which now prevail regarding their nomenclature and to afford a scientific basis for their selection in cultivation. The improvement of the staple itself has occupied the special attention of the Inspector-General of Agriculture since his appointment in 1901. Earlier efforts were too much devoted to the acclimatisation of exotic species, and while his object is still kept in view, the experiments now being carried on at the various Government farms under the close personal supervision of the Inspector-General, who has studied the

methods adopted in America, are mainly directed towards improving existing indigenous varieties and obtaining new and improved varieties by artificial cross-fertilization. The next steps in the process will be the extended cultivation of the selected forms on demonstration areas and seed farms and the distribution of seed so grown to picked cultivators under official supervision. Many private land-owners, and notably the planters of Behar, are co-operating with the Agricultural Departments in these experiments, and during the current year nearly 20,000 pounds of selected seed have been distributed by the Inspector-General of Agriculture for the purpose of testing the suitability of soil, climate and cultivation to different varieties, the greater portion going to Behar.

3. Private enterprise has also taken up the subject on a considerable scale. Encouraged by their success in extending and improving cotton cultivation in parts of the Central Provinces, the firm of Messrs. Shaw Wallace and Company of Calcutta are forming a syndicate for the promotion of long-stapled cottons. Besides starting practical cultivation on a large scale, the Syndicate will undertake experimental work, which, like the experiments in progress on Government farms, will include the selection and improvement of suitable varieties of seed, and their cultivation in experimental plots by planters and others. When the varieties likely to give the best results have been ascertained, they will be cultivated on a number of small demonstration farms for the purpose of illustrating to the ryots the advantages they promise and the best methods of their cultivation. The main object of the Syndicate will be to increase the production of long-stapled cottons suitable for the Lancashire mills, and towards the expenses of this pioneer work the Government of India and the British Cotton-growing Association have agreed to contribute in equal shares a sum of £6,000.

4. The foregoing paragraphs will give $\frac{\text{His Excellency the Governor in Council}}{\text{His Honour the Lieutenant-Governor}}$ a general indication of the measures in progress for what may be termed the scientific improvement of Indian cottons. The Government of India are hopeful that they will produce results of great benefit to Indian agricultural interests. But the process of discovering the best varieties for different tracts, of growing them in sufficient quantities, and of inducing the cultivators to accept and sow them over any large area, must necessarily take several years. Meanwhile it appears to them that much can be done at comparatively little expense to effect an immediate improvement in the quality of existing varieties, on a large scale, by helping the cultivators to obtain the best seed already available; and it is to the consideration of this aspect of the question that I am now to invite particular attention.

5. There is abundant evidence to show that one of the main causes of the general deterioration which has occurred in the quality of the cotton produced in many parts of India is carelessness in the selection of seed, which is fostered to a considerable extent by the practice which has become general in recent years of sending all cotton grown to ginning-mills and getting back from them for sowing purposes any kind of seed they happen to have ready for sale. Thus, Sir G. Watt referring to the influence of ginning-mills writes "Each of these received, ginned and baled the cotton from thousands of cultivators, the produce often of the most diverse soils, and mixed them together, the result being that the seed given back to the cultivators was equalised and degraded by the loss of the special properties that it had taken thousands of years to evolve." The British Cotton-growing Association remark that the "various classes of cotton in India are often mixed, and consequently the quality has very much deteriorated and the bulk of the cotton grown is nowhere as good quality as it was twenty years ago." They attribute this to the mixing of all sorts of seed by the cultivators or at the ginning-mills, and urge the importance of enabling the peasant to obtain pure seed at a reasonable or even nominal price. The Inspector-General of Agriculture writes "the advent of ginning factories has not tended to deteriorate quality and introduce admixture in the Broach and Surat Districts" (where high class cotton cultivation is practised), "but they have had that effect in many parts of India. Deterioration in cotton must occur unless seed from the most productive plants in each year is saved for sowing. The custom of hand-ginning at home for

seed purposes prevails in some districts, but the custom of getting any description of seed from the ginning factories is much too common." Mr. Greenway, of the firm of Messrs. Shaw Wallace and Company, who is the principal promoter of the Indian Cotton-growing Syndicate, and who has practical experience of the subject, considers the inferiority of the seed commonly sown to be one of the chief evils to be dealt with, and strongly advocates cultivation and distribution of selected seed. A member of the firm of Messrs. Ralli Brothers testifies to the decline in the long-stapled cotton of the hilly tracts of Berar and attributes it "principally to the seed being mixed in the ginning factories which have sprung up in late years, and being bought and sown mixed by the Kunbis."

6. It appears to the Government of India to be very important that steps should be taken to counteract this tendency on the part of cultivators to grow any kind of seed that may be readily procurable, and to aid them in obtaining the best seed available of the varieties of cotton which experience has proved to be the most suited to their environment and to the methods of cultivation locally in vogue. It is true that seed thus collected will not be pure in variety except where pure varieties are already grown; but the cotton produced from carefully picked seed must necessarily be better of its kind than cotton grown from unselected seed, and the immediate object of the suggestions now made is not so much the substitution of improved for inferior or pure for mixed varieties, as a general improvement in the out-turn and quality of the crop as now grown, so far as this can be secured by care in the selection of seed. The Government of India have been struck by the popularity and success of the operations undertaken by the Agricultural Department in the United Provinces of Agra and Oudh for the supply of good wheat seed to cultivators. These are described in the Director's annual report for 1901-02, paragraphs 65-67, and 1902-03, paragraphs 57, 58, which will be found appended to this letter; and in the opinion of the Government of India a similar system might be applied with great advantage to cotton.

7. I am now to offer for <u>the consideration of His Excellency the Governor in Council</u> / <u>the consideration of His Honour the Lieutenant-Governor</u> / your consideration some suggestions for action towards the end in view. The first thing necessary is the collection of a sufficient quantity of good seed from selected fields and plants. For this purpose official or non-official agents of the Agricultural Department might be appointed in each cotton-growing district as seed-selectors to go round at the cotton-picking season and select the best fields of the local well-known varieties, preference being given to plots sown with unmixed seed. The produce of the fields selected would be purchased and the seed hand-ginned, collected and carefully stored, the lint of the crop being sold to the best advantage. The seed should be taken only from healthy plants and from the finest bolls of the second and third picking, as the first picking generally includes diseased bolls which open prematurely, and the last pickings from plants which have begun to dry up give badly developed seed of low vitality. In storing the seed, which should be carefully done, different varieties should be kept apart and labelled. On the approach of the next sowing season the seed thus collected would be sold or distributed to cultivators on such liberal terms as the Agricultural Department may consider suitable, especial care being taken to give to each cultivator seed only of the variety with the method of cultivating which he is already familiar. Arrangements might also be made at small expense with selected cultivators known to be good cotton-growers for a supply of good seed from their existing crop, and the services of intelligent landholders and shopkeepers might be enlisted in selecting and distributing good seed on a large scale, care being taken that the terms allowed them were sufficient to cover the extra trouble and expense involved in the process of selection. A small sum judiciously spent in a village with a few good fields of cotton might lead to a marked improvement in the village and its neighbourhood in the quality of the whole of next year's crop, though the variety grown would still be the same as that to which the cultivators were accustomed, and no change in the methods of cultivation with which they were familiar would be required. If it is made worth the while of ordinary intelligent cultivators to select seed for themselves and others, some good result may be attained even where skilled supervision is not available.

8. It will also be advisable to enlist the aid of the owners of cotton-ginning mills in the selection and supply of good seed. It should be explained to all owners of such mills that the present system under which seed is indiscriminately distributed necessarily leads to a general deterioration in the quality of cotton grown, and therefore to a diminution in the price they can get for their cotton when ginned. They should be urged to gin separately any good lot of cotton, to keep the seed separate, and to send out for sowing purposes only such selected seed, care being taken to send it only to such parts of the country as have been proved suitable for that particular variety of cotton. Many Millowners would, it is hoped, see that this course would be ultimately to their advantage as well as to that of the cultivators, and would take the little extra trouble involved without pecuniary inducement, but if necessary Government might buy such selected seed from them at a price sufficient to induce them to take the trouble, and sell it at a favourable price to cultivators for sowing purposes.

9. The Agricultural Department will be able to judge how far these suggestions or any modifications of them are feasible and suitable to local conditions. In commending the subject to the careful attention of His Excellency the Governor in Council / the careful attention of His Honour the Lieutenant-Governor / your careful attention I am to say that should the Local Government accept the scheme and be prepared to spend on it an equal sum from provincial resources, the Government of India would be willing to contribute a grant of Rs. 5,000 towards establishing a system of selection of seed from this year's cotton crop on the lines indicated. If the experiment proves successful it may, with advantage, be extended hereafter to other important staples.

10. I am to explain that it is not the intention or desire of the Government of India that the action now advocated should in any way interfere with or absorb funds which may have been set aside for the purpose of carrying out the measures for the improvement of cotton initiated by the Inspector-General of Agriculture and the local Agricultural Departments, to which reference has been made above. They attach the greatest importance to the uninterrupted prosecution of those measures. Mr. Mollison has described them in a report, dated 30th November 1903, of which I am to enclose a copy for information. The Governor-General in Council trusts that these experiments will not be allowed to languish for want of funds or energy, and that liberal assistance in the form of land, money and men will continue to be given for experimental work, for demonstration farms, and for seed farms on the lines sketched by the Inspector-General, whose advice is always at the disposal of the Local Government.

I have the honour to be,
Sir,
Your most obedient servant,
J. WILSON,
Secretary to the Government of India.

To

The Chief Secretary to the Government of Madras.
" " " " " Bombay.
" " " " " Bengal.
" " " " " the United Provinces.
" Revenue Secretary to the Government of the Punjab.
" " " " " Burma.
The Honourable the Chief Commissioner of the Central Provinces.

No. 542-C., dated Camp Surat, the 30th November 1903.

From—J. W. MOLLISON, ESQ., M.R.A.C., Inspector-General of Agriculture in India,

To—The Secretary to the Government of India, Department of Revenue and Agriculture.

In reference to your No. 3782-33-4 of 18th October 1901, I have the honour to sub-

mit the following report.

2. I have given particular attention to the improvement of Indian cotton during the last three years. My enquiries may be grouped under the following heads :—

I.—The characteristics and comparative values of the numerous indigenous varieties and their adaptiveness for various descriptions of soil and climate.

II.—The improvement of indigenous varieties through the selection of seed and by cross-fertilization and selection.

III.—The value of exotic varieties for various descriptions of soil and climate and the effects of acclimatization.

IV.—The reasons why the cultivation of some inferior indigenous varieties has extended and that of some long-stapled varieties has declined.

V.—Deterioration of indigenous varieties.

VI.—Are cultivators deterred from growing long-stapled or fine cotton because they do not get remunerative prices for such cotton ?

VII.—The means of introducing improved varieties into general cultivation.

VIII.—Are different varieties mixed in ginning or baling? Is such admixture deliberately done for legitimate trade requirements or for fraud?

3. In connection with the questions above referred to, I have seen in every Province of India, excepting Burma and Assam, nearly every indigenous variety growing in its own district. I have had almost every indigenous variety and many exotic varieties experimentally grown under varying conditions of soil and climate. I have seen in the field the results obtained by acclimatizing exotics. I know the results of experiments conducted by the various Agricultural Departments and by non-official agency. I have sought information from the various Chambers of Commerce, and from a large number of gin-owners, mill-owners, and exporters. The information obtained, as far as it is reliable, is collated below under the eight heads referred to in paragraph 2.

4. *Indigenous varieties.*—We have not yet a complete census of Indian varieties. I have examined over one hundred forms which from an agricultural point of view must be considered different. The differences have, I believe, in many cases been induced by local conditions. Experiments during the last three years have proved that the agricultural characters of any variety can be very much modified by moving it from its own district to another. The modification may cause deterioration or the reverse as regards vigour of growth, quality, and value of lint and percentage of lint to seed. The effect of acclimatization has not yet been determined. The modifications induced by differences in soil, climate, and cultivation are as considerable, in my opinion, as those produced by heredity. The practical effect is that particular varieties have inherent characteristics which suit them for local conditions. A favourable season of well distributed and prolonged rainfall not only increases outturn, but also favourably affects the length and quality of lint. Indian varieties may be broadly grouped into—

(*a*) varieties which take at least eight months to come to maturity :

(*b*) varieties which ripen in about five months.

The varieties of the first group as dry crops are only suited for districts with deep-moisture-holding black soil or for such districts as have an exceptionally prolonged rainy season, as for instance in parts of Bombay and Madras where the influence of the two monsoons is felt. These late ripening varieties would in most seasons fail in the North of India where December cold would arrest or destroy growth. The plants are bushy and prolific. The length and quality and percentage of lint are fair to good, depending upon local conditions. These late ripening varieties are all of the Broach type. The influence of sea breezes on the Broach and Surat Coasts improves the quality of the lint produced in these as compared with more inland

districts, and the fine quality of Tinnevelly cotton is probably due to the same effect. Experiments in 1902 and 1903 indicate that cotton of the Broach type can successfully be grown on worn out indigo lands in Behar, and if young seedlings will withstand the hot winds of April and May in the North of India, this type of cotton could be grown on extensive canal irrigated tracts in the United Provinces of Agra and Oudh, Punjab and Sindh, where very inferior cotton is now grown. I will show later that something better than the Broach variety may possibly be successfully introduced into these tracts. The majority of the late ripening varieties produce lint which is suitable for 20 to 40 counts of yarn. The percentage of lint to seed is over 40 per cent. in the best Broach and under 25 per cent. in the worst Madras varieties. This inferiority is very largely due to impoverished soil, careless cultivation, and no care in selection of seed.

The varieties included under group (*b*) are much more numerous than those included in (*a*). They are widely cultivated in every Province of India excepting Madras. With the exception of a very few varieties of the Bani or Hinganghat type which are grown in very limited areas, the rest produce cotton which is short and coarse but pure white in colour. The percentage of lint to seed is high or very high except in some varieties of the Bani type. Nearly all can be grown without irrigation in every province under varying conditions of soil and climate and with very little risk of failure and mishap. In almost all varieties the plants are tall with few side branches, few flowers and individually are not productive. There are some varieties of this group very much better than others for general cultivation and which deserve special attention in aiming at improvement by selection of seed and by crossing with other indigenous varieties. Eighteen of the 92 varieties which I have examined are of this class. Some varieties of this group have white flowers. The lint from white flowered plants, though dense on the seed, is generally coarser and shorter than that from yellow flowered plants.

5. *The improvement of indigenous varieties.*—Our experiments have proved the length and quality of lint and the percentage of lint to seed are improved by superior cultivation and by selection of seed from the most prolific plants continued year by year. It has yet to be shown whether these improvements will be maintained when seed is distributed extensively for ordinary cultivation. Experiments were begun in 1901 on the Bombay farms in cross-breeding with a few indigenous varieties, and the work has since been extended in Bombay and in other Provinces. This method of improvement became necessary because every indigenous variety has degenerated. This is not due to exhausted soil and inferior cultivation only. Some of the most degenerate forms are found in the rich alluvial soils of the Indo-Gangetic plains. Indian varieties have degenerated and weakened because they have been grown from the same strain of seed for many generations. I believe that cross-fertilization through insect agency or otherwise rarely occurs in cotton because each flower is fertilized by its own pollen before it opens. If natural cross-fertilization was common, the number of varieties in India would probably be legion, because excepting in Broach and Surat and in parts of Madras varieties are rarely grown unmixed. In the majority of fields several will be found growing together. A small parcel of seed received this year from Sindh produced seven kinds. In the cross-breeding experiments now in progress two main objects are in view. They are—

(*a*) to produce from late ripening varieties crosses which have greater vigour of growth and productiveness than the parents.

(*b*) to produce from the best late and best early ripening varieties crosses which are vigorous, bushy, productive plants, and which will ripen nearly as soon as the early ripening parents.

The results of these experiments indicate that the aims in view will be realized.

The (*a*) crosses are from varieties which are very similar in type and do not show any remarkable alteration of characters. They show—

I.—Increased vigour of growth.

II.—Great productiveness in some plants, ordinary productiveness or nearly barrenness in others.

There are a sufficient number of very productive plants this year to give cotton in sufficient quantity for a practical valuation by trade experts and to determine the proportion of lint to seed. I believe the productive plants are of fixed type and therefore we can soon pass on a selected cross from the experimental plot to the cultivator's field.

The (*b*) crosses are from varieties which in type are very unlike. The first effect of cross fertilization has therefore been to produce great variation. The plants produced from seed of a single cross-fertilized boll showed in the first generation considerable variation and in the second generation great variation. In the second generation it is easy to mark the plants with promising characteristics. Cotton from the most vigorous and productive plants will be obtained in sufficient quantity for valuation by trade experts. But, I fear, variation in type will continue, and there will be no extensive cultivation for some years. In regard to selected (*b*) crosses, the outstanding and most reliable results are—

I—that selected plants are much more productive and vigorous in growth than any existing quick ripening variety ;

II—they mature nearly as quickly as any of the early ripening varieties ;

III—that for this reason they may be found suitable for districts where the normal character of the season has hitherto only been suitable for inferior quick ripening varieties;

IV—that the cotton of selected plants gave a satisfactory percentage of lint to seed and the lint was superior to that of either parent. Small parcels of lint from selected plants were valued by experts in 1902 at higher rates than Navsari (best Surat cotton).

6. *The value of exotics.*—Particular reference is made in the papers to successful experiments in Madras with Egyptian and American varieties of cotton. There were experiments conducted at Saidapet 20 to 30 years ago which have had no practical results. There is no extended cultivation due to these experiments. The only exotic cotton which is cultivated to any appreciable extent in Madras is Bourbon cotton. It was introduced about 100 years ago, and a few thousand acres are now grown in the Erode (Coimbatore) district. The crop is not grown unmixed and the lint sells at less than other Madras varieties. An acclimatized American variety has been grown for over 30 years in the Dharwar district of Bombay. Its cultivation was at one time extensive. It is now declining. "Upland Georgian" has been thorougly acclimatized on the Nagpur Farm, and in many fields in the Central Provinces a stray plant here and there can be seen, but there is no general cultivation. Several American varieties of the "upland" type have been more or less acclimatized at the Cawnpore Farm and they have been recommended for general cultivation in the United Provinces of Agra and Oudh but with no particular success. Native cultivators have not taken kindly to exotics, because even when acclimatized, they are more risky to grow than ordinary indigenous varieties, being liable to mishaps due to insect attack, heavy downpours of rain, and such like. The acclimatization of exotics in India, moreover, causes general deterioration, so that in time the lint is not so valuable as that of the finer indigenous varieties. The characters of exotic varieties become altered in other ways. It can be proved that deterioration has occurred in the size of bolls, in the size of seed, in the percentage of lint to seed, and of oil in the seed. Experiments on Government Farms and through non-official agency have proved that newly introduced American and Egyptian varieties do badly or fail on black soil, in many parts of India and in an unfavourable season succumb far sooner than indigenous varieties on any description of soil. On the other hand, 27 newly introduced American varieties and five acclimatized American varieties did surprisingly well in 1902 at Hissar (Punjab) on deep rich alluvial soil helped by irrigation. The quality of the lint varied between varieties far more than actual outturn. The lint of two varieties was declared suitable for 30s, of 19 varieties for 40s, of 2 varieties for 50s, of 2 varieties for 60s, and of 2 varieties for 80s. The same varieties are this year under experimental

trial in Behar (Bengal) on various indigo concerns. The season has been very unfavourable. The most of them have done badly, some have failed. Acclimatized American varieties and indigenous varieties of the Broach type which were grown in comparison have done much better.

Attempts to introduce exotic varieties of cotton on the black soils of Madras, Bombay, Berars and the Central Provinces are not likely to be successful. The adaptability of exotics may possibly be proved for the drier portions of the Indo-Gangetic plain, where, as in Behar, the rainfall is moderate and well distributed, or where, as in wide areas of the United Provinces of Agra and Oudh, Punjab and Sindh, deficient rainfall is supplemented by cheap canal irrigation. Exotics do much better on alluvial soil than on black soil. If the cultivation of any exotic variety becomes established in any district, the deterioration of lint which is caused by acclimatization may possibly be arrested and improvement may be effected by cross fertilization. The "upland" varieties of Nagpur and Dharwar have been cross-fertilized with newly imported American varieties. The resulting crosses look promising, but I can report nothing more definite.

7. *The extension of cultivation of inferior varieties*—The question of profit and loss is largely accountable for the extension of cultivation of some inferior varieties of cotton and the decline in cultivation of some long-stapled varieties within recent years. The most remarkable change which can be referred to is the gradual decline in cultivation of the Bani variety in the Central Provinces, Berars, and Khandesh. It is known as Hinganghat cotton and has a high reputation in the trade. The Jari variety has taken its place in the Central Provinces and Berars and the Varudi variety in Khandesh. Both these varieties yield better than Bani in average seasons and are less risky to grow in a bad year. They yield, moreover, much higher percentages of lint to seed. The cultivator on an average realizes more for the inferior variety crop, even though the lint of Bani is usually worth 25 per cent. more.

In some districts, notably in Kathiawar, quick ripening inferior varieties of the Jari type have been introduced in recent years. Formerly only late ripening varieties of Broach type were grown. The reasons are that the inferior variety can be grown on light soil which is unsuitable without irrigation for varieties of the Broach type. It can be grown without much risk in a year of short rainfall. It yields well in average years and the outturn is realized in five or six months. The cultivation of inferior quick ripening cottons will continue and may extend until superior varieties are found which can be grown as quickly without risk and are more profitable in average seasons.

8. *The deterioration of indigenous varieties.*—There can be no doubt that deterioration has occurred. The plants which produced lint suitable for the historical Dacca muslins either does not now exist in India or its lint has deteriorated. It is generally believed that the lint of Bani is neither as silky nor as long as that known as Hinganghat cotton thirty or forty years ago. The cotton now produced in Broach and Surat does not maintain its ancient reputation. If in these districts deterioration has occurred, there must be greater deterioration elsewhere. In no other part of India is cotton so well cultivated. The deep black soil is naturally very fertile. This natural fertility is maintained at rather a high standard at any rate in the Broach district by a system of thorough bare fallowing which is common. The seed is drilled in accurately straight equi-distant rows. The seedlings come up thick and are thinned out by hand. Ultimately the strongest and healthiest seedlings are left in the rows. This is a natural process of selection which has gone on for many years. The practical result is that the length and quality of the lint is better than in the same type of cotton grown in other districts. The advent of ginning factories has not tended to deteriorate quality and introduce admixture of varieties in the Broach and Surat districts, but they have had that effect in many parts of India. Deterioration in cotton must occur unless seed from the most productive plants is each year saved for sowing. The custom of hand-ginning at home for seed purposes prevails in some districts, but the custom of getting any description of seed from the ginning factories is much

too common. I attribute deterioration to continued cultivation from the same strains of seed for many generations, to carelessness in selection of seed and in cultivation and to impoverished soil particularly in parts of Madras, the Nizam's territory, Berar, Central Provinces, and Central India.

9. *Are cultivators deterred from growing long stapled or fine cotton owing to unremunerative prices?*—It is often stated that there is no differentiation in price made by the dealers between inferior and superior varieties of cotton. This is not correct. There is a big difference in price between fine quality cottons such as Surat, Hinganghat, and Tinnevelly in comparison with such inferior short stapled cotton as is classed as " Bengal " by the traders. The superior produce of particular districts, as for instance that of Navsari in the Surat district, always commands specially high rates. There is clear evidence that spinners in India and elsewhere would give enhanced prices for Indian long stapled cotton if pure unmixed varieties were grown. The assertion that it pays the dealer to mix good and bad since the good alone does not secure the price it merits, cannot be substantiated. The present conditions of demand are such that special efforts to improve quality are very well timed. Such improvement would be profitable to agriculturists. In addition to the export demand there is an internal demand for cotton suitable for fairly high counts of yarn. I know that Bengal Millowners have to go as far as Madras and Bombay for their requirements and pay heavy freight charges. Indian Millowners have now to import Egyptian, and, I believe, sometimes American cotton for the higher counts of yarn. It is surely conceivable that if we produce on the spot the kind of stuff they want they will pay for it. We must, however, safeguard the cultivator and keep always in view the necessity of growing only such improved varieties as are hardy enough to stand unfavourable conditions of adverse seasons and so prolific that they will yield better than existing varieties in average seasons. I have been informed by many Millowners that there would be a big demand in India for cotton suitable for spinning 40 counts and higher counts of yarn.

10. *The means of introducing improved varieties into general cultivation.*—I am very strongly of opinion that the improvement of varieties must be worked out district by district and to a very considerable extent locally. The inherent characteristics of our best Indian varieties which are due to local conditions must not be lost. The improvements should be grafted on to these. When it is fairly certain that an improved variety of fixed type has been produced, its cultivation should be extended from the experimental plot to small Demonstration Farms in the district for which it is considered suitable. These Demonstration Farms need not exceed five acres each. They should be sufficiently numerous to prove to cultivators in a given tract that the variety is *really* an improved variety which can be profitably grown under average conditions of cultivation. If this is believed by the most skilful cultivators, extension of cultivation can be rapidly arranged for. One acre of good crop will give seed sufficient for 25 acres. Seed should be distributed in the first instance to selected cultivators on the condition that such pickings of the resulting crop as are best for seed purposes be hand-ginned and the seed made available to Government at market rates for distribution. Seed stores and a special establishment will be required in each district until its requirements are fully satisfied. The risks of damage by insects or otherwise to cotton seed stored in bulk in corrugated iron sheds with paved floors are small.

11. *Fraudulent admixture in ginning and baling.*—It is certain that varieties of cotton are mixed in ginning and baling to a very considerable extent—

(*a*) to improve colour and for legitimate trade requirements ;

(*b*) fraudulently in order to mix very inferior cotton with better cotton and to increase the weight of bales by adding rubbish.

It would not, in my opinion, be expedient for Government to take measures to regulate false packing. The remedy is in the hands of those engaged in the cotton trade.

Extract paragraphs 57 *and* 58 *from the Report of the Director, Department of Land Records and Agriculture, United Provinces of Agra and Oudh, for the year* 1902-03.

* * * * * * *

Distribution of seed.

57. The demand for seed, purchased for cash at Cawnpore, shows a marked increase: 588 maunds were sold as against 336 in the preceding year. These transactions are conducted mainly with landholders and planters, and a large amount of seed has gone outside the province, especially to Behar. The chief demand is for the soft white wheat of the Meerut division, known as Muzaffarnagar wheat, of which about 225 maunds were issued. The other staples in demand were barley, gram, Jaunpur maize, and to a less extent oats and rape.

A European planter in Gorakhpur, who was trying the Muzaffarnagar wheat, obtained last year 41 maunds to the acre in one trial—an outturn which caused considerable stir in the locality as it well might: of course it must be remembered that the season generally was exceptionally favourable for wheat.

58. Our dealings with smaller cultivators are conducted not in cash but in grain on the system described in last year's report. The seed is not "selected" in the technical meaning of the term: that is to say, it is not the produce of individual plants selected for their marked advantages: but it is carefully chosen by expert buyers, and is then cleaned so as to exclude all deformed seeds and foreign matter. The clean seed is issued to the cultivators at 25 per cent., and what they return is examined, the best kept for re-issue, and the inferior lots sold off. Operations continued at all the centres enumerated in last year's report and were extended to the vicinity of the Cawnpore experiment station. The demand increases and over 4,000 maunds of these seeds were issued during the year under report: while we have recently had to import 800 maunds more to meet the demand for the current season. Here, too, the Muzaffarnagar wheat is our chief article; and it is instructive to recall that when I began this work I was advised by competent authorities on no account to offer foreign seed but to give the people the best of the local produce: now our cultivators very much prefer the imported stuff. We are now issuing kharif seed also, though not to the same extent as rabi seed: and an experiment is being made on a small scale to see if the highest classes of rice, which are usually grown in the submontane districts and fetch fancy prices, can be grown with success in the rice tracts of South Oudh. The demand during the year was collected without loss, and the profit which has accumulated is employed in extending our business. An untoward feature of the late season was the appearance of weevils in two of our stores, due to the exceptionally damp weather of October: the prompt action of the Assistant Director was successful in avoiding any serious loss from these pests.

In connection with this branch of our work I desire to acknowledge particularly the assistance afforded by the Special Manager of the Court of Wards Estates in Partabgarh: Mr. Hill has co-operated enthusiastically with the department for several years, and the estates under his charge have now a supply of seed-grain which is probably unequalled for quality in the province.

* * * * * * *

Extract paragraphs 65-67 *from the Report of the Director, Department of Land Records and Agriculture, United Provinces of Agra and Oudh, for the year* 1901-02.

* * * * * * *

Distribution of seed.

65. The work of the department falls into two divisions: cash sale of seeds at Cawnpore, the issues including such foreign staples as are asked for, as well as the best local varieties; and issue of seeds on loan to cultivators from various depôts. From Cawnpore 36 kinds of seed were issued, about 336 maunds in all being disposed of. The varieties most in demand were Muzaffarnagar wheat, Cape oats, and Jaunpur maize. The demand for Canadian oats, acclimatised cotton, *inga-dulcis*, peas and rape was in excess of the available supply.

66. Seed depôts were at work during the year in Partabgarh, Aligarh, Meerut, Mohanlalganj, Beti, Sultanpur and Amethi. The first three are managed and financed directly by the department: those at Mohanlalganj and Beti are managed by the Court of Wards with departmental assistance: those at Sultanpur and Amethi are managed by the department but financed by the District Board. In addition to these centres, operations have started in Fyzabad, where the Deputy Commissioner has devoted some funds at credit of the Agricultural Show to the same purpose.

67. The scheme of operations at these various centres is uniform: clean, sound seed is issued to cultivators who return the produce at harvest time *plus* 25 *per cent.* The receipts are carefully cleaned and picked, all inferior seed being sold and the balance kept for issue in the next year. When operations started in Partabgarh I tried to work through the landholders, but their interest in the matter was short lived and direct dealing with the cultivators is proving far more satisfactory. The work done during the year may be summarised as follows. The issue from the depôts controlled by the department were 756 maunds, of which 534 maunds were Muzaffarnagar wheat. The Mohanlalganj depôt issued 217 maunds, consisting of wheat and oats, and that at Beti 621 maunds, mostly wheat. The depôts at Sultanpur and Amethi issued 444 maunds of wheat and a small quantity of maize. The total issues thus amounted to over two thousand maunds. There was practically no loss in recovery, and issues for the current rabi are on a considerably increased scale, while arrangements are being made to procure stocks of kharif seeds for which a demand has arisen. The work is carried on at a small profit, which is devoted to extending operations: it does not at present admit of reducing the rate of interest. The keenest desire for seed continues to be manifested in the neighbourhood of Amethi, where the cultivators crowded to the railway station to await the arrival of the imported seed; but in other localities also the services of the department are cordially welcomed.

* * * * * * *

MILLOWNERS' ASSOCIATION,
BOMBAY, 21*st January* 1905.

THE ACTING UNDER-SECRETARY TO GOVERNMENT,
REVENUE DEPARTMENT,
BOMBAY.

SIR,

Under the instructions of the Committee of the Bombay Millowners' Association, I have the honour to acknowledge the receipt of your letter No. 8568/A, dated 4th November 1904, with which were enclosed copies of the letter No. 23-9-36 of the Government of India, Revenue and Agriculture, relating to proposals for the improvement of cotton cultivation, with special reference to the selection and distribution of seed suitable for sowing.

2. I am to say that my Committee heartily commend and welcome the scheme. It appears to them to be both practical and well considered, and I am to give expression to their hope that so useful and promising a project may not be frustrated by any delay in the assignment of funds sufficient for the employment of an adequate number of selectors. I am to emphasise the consideration that the mixing of seed at ginning factories, which has played so large a part in the deterioration of the Indian staple and which in this sense is specifically alluded to in para. 5 of the letter of the Government of India, is enabled by modern transport facilities to exert a pernicious influence of extraordinarily wide range and intensity. For this reason a relatively small sum expended now in arresting the evil will produce results greater than could be obtained by the outlay of much larger sums later on.—I have, &c.,

FREDERICK NOEL-PATON,
Secretary.

Appendix L.

Registration of Trade Marks in China.

COPY OF TRANSLATION OF THE PROVISIONAL REGULATIONS CONCERNING THE REGISTRATION OF TRADE MARKS IN CHINA.

FORMULATED BY THE CHINESE GOVERNMENT.

To come into force, 23rd October 1904.

1. All Merchants, Chinese or Foreign, wishing to make exclusive use of trade marks, must have them registered in conformity with the following rules.

The principle, underlying the constitution of a trade mark, is that it must, in design, in verbal description, or in whatever form it assumes, possess a distinctive character of its own. All three forms may be employed together or separately.

2. The Board of Commerce will establish an office, which shall have the sole control of matters connected with registration.

The Custom Houses at Shanghai and Tientsin will be created branch offices of registry, where application for registration may be made as most convenient to those concerned.

3. All who desire to register trade marks must send in their applications to the Head Office or to either of the branch offices.

4. To every application must be appended a memorandum. This memorandum, in addition to giving a full description of the mark, must be accompanied by a triplicate copy of the same, must state the kind of goods it is intended to cover, and the classes, or sub-classes, under which they come (for classification *vide* below). In the event of application being made to a branch office, it and the memorandum must be made out in duplicate.

5. If on receipt of an application the Head Office finds it to be in order, and if, within a period of six months, no protest against the same shall have been made, Registration will be proceeded with.

6. Application in respect of marks resembling each other, or for the same or similar kind of goods, will be entertained in order of their presentation. The first comer will have the right to Registration. All marks, in respect of which application is made on the same day, and at the same time, will be registered.

7. In the case of trade marks registered abroad, if application for Registration be made within a period of four months from the date of original Registration, the date of original Registration will be accepted (as the date from which Registration in China shall count).

8. Trade marks which infringe the following conditions cannot be registered :—

(*a*) Marks likely to injure young or old, offending against morality or harbouring an intent to deceive.

(*b*) Marks embodying symbols or phraseology reserved for Government use, *e.g.*, Imperial or official seals, the national standard or military flags, or devices appropriated for the reward of merit (such as the Insignia of an Order).

(*c*) Marks already registered, or marks resembling, or of the same nature as marks which for over two years prior to the application for registration have been publicly used in China or have covered a similar class of goods.

(*d*) Marks in respect of articles which cannot be clearly specified.

9. The period during which Chinese or foreign merchants shall have the exclusive right to a trade mark is limited to twenty years from the date of registration.

The period for trade marks registered abroad, which it is desired to register in China, shall count from the date of original registration, but in no case must it exceed twenty years.

10. If owners of a trade mark wish to have their exclusive rights therein continued, they must, within six months prior to the date of expiry, give notice of their intention to renew registration.

11. If an owner of a registered trade mark wishes to transfer his exclusive rights therein to another, or to give others a share therein, he must at once give notice to the Registration Office and have the fact recorded.

12. If a mark already registered contravenes paragraphs *a*, *b*, or *d* of Regulation 8, the Registrar will have the right to cancel the same.

13. Anyone who considers himself injured by the fact that a mark has been registered in contravention of Regulation 6, or Regulation 8 (*c*), may apply to the Registrar to have registration cancelled, but he must do so within a period of three years from the date of registration.

14. The Registrar must state in writing any reasons he may have for refusing to register a trade mark.

15. Any reason for objection to the Registrar's ruling under Regulation 14 must be filed within six months from the date of refusal to register. If this be done the decision will be subject to revision.

16. Applicants for registration or owners of trade marks not resident in China, or residing at a distance from the Registration Office, must appoint some trustworthy agent to act for them.

17. Copies of entries on the Register, or permission to inspect the Register, may be applied for through the Registration Office or its Branches. Those residing at a distance may apply through their agent.

18. The Registrar will publish a Trade Marks Gazette with a list of trade marks, and of any matters concerning the registration or cancellation of the same.

19. At the instance of the owners of exclusive rights in a trade mark, suits may be instituted against any who may infringe such rights, and, on conviction, the latter will be mulcted in damages.

20. Suits for infringement of trade marks will be conducted as follows :—

(*a*) If the defendant be a foreigner, the local authorities will move the Consul concerned to hold a joint investigation and trial.

(*b*) If the defendant be a Chinese, the Consul concerned will communicate with the Chinese authorities and a joint investigation will take place.

(*c*) If both plaintiff and defendant are Chinese, or if both are foreigners, the Courts concerned will, in case of infringement, afford all necessary protection.

21. The undermentioned offences are punishable with imprisonment up to one year, and a fine not exceeding Tls. 500, but judgment can only be given in a suit instituted by the party aggrieved:—

(*a*) Any attempt to use a similar class of goods, or to imitate a registered trade mark belonging to another party, or to offer the same for sale.

(*b*) To imitate a trade mark, or apply it to a similar class of goods, or knowingly to sell such goods, or have the same on the premises for purposes of sale.

(*c*) To use an imitation of a trade mark as a "chop," or to employ it for purposes of advertisement.

(*d*) Knowingly to use packages or wrappers bearing the registered trade mark of others, for the same class of goods, or knowingly to offer the same for sale.

(*e*) To import goods, being well aware of the fact that they infringe the trade mark rights of others.

22. In the event of any infringement, such as described in Regulation No. 21, being discovered, all trade marks, or articles used for making the same, shall be confiscated, and any goods or wrappers, packages or "chops," which cannot be disassociated from the marks they bear, shall be destroyed.

23. Chinese or foreigners must pay fees according to the following scale, in connection with the registration of their marks and the issue of certificates:—

	Haikuan. Taels.
On every application to register a mark	5·00
On registration of a mark and issue of a stamped certificate	30·00
On transfer of, or declaration of partnership in, a mark	20·00
On renewal of registration	25·00
For every copy of a document, connected with registered marks ...	2·00
If above 100 characters, for every additional 100 characters	50
For inspecting register, every half hour	1·00
For renewal of certificate, if lost	10·00
On reporting any case of fraudulent imitation	5·00
On application for reconsideration of ruling given	5·00
On application to cancel registration	30·00
On requesting the transfer of ownership rights to next of kin, in the event of death	5·00

SUPPLEMENTARY REGULATIONS.

24. The above Regulations will come into force on the 15th day of the 9th moon of the 30th year of Kuanghsu (October 23rd, 1904).

25. As, according to Treaty, reciprocal protection is guaranteed, the Registration Office undertakes to recognize as valid all applications for registration of trade marks, made through the proper channels, prior to its assuming its functions.

26. If, in the case of trade marks registered abroad, application for registration has been made to the Registrar within six months of the Office commencing its functions, such applications will be considered as standing at the head of the list.

27. Trade marks, which, prior to the commencement of its functions, by the Registration Office, may have been protected by proclamation on the part of the local authorities, will cease to enjoy such protection, if due application for registration be not made within six months of the time when the Registration Office shall have been opened.

28. The three foregoing Regulations do not affect the provisions of Regulation No. 5.

The above Regulations are provisional and are subject to revision when the Code governing trade marks shall have been compiled.

DETAILED RULES OF THE TRADE MARKS REGISTRATION OFFICE.

1. All applications and memoranda connected with Trade Marks must be made out in duplicate. They must state clearly applicant's name and residence, and the date on which application is made.

Applications must be made in the Chinese language, and foreign applications must be accompanied by Chinese translations.

2. Applications must be made out on the forms laid down.

3. Applications, made through an agent, must be accompanied by proof of authority to act.

4. The Branch Offices will retain the copies of the applications made to them, and forward the originals to the Head Office.

5. The Head Office will number all applications made to them, and furnish the applicant with his particular number, which, in all future correspondence regarding his application, will have to be quoted.

6. In any correspondence regarding registered marks, the register number of the mark must always be cited.

7. In cases where first application has been made to a Branch Office, the latter must forward to the Head Office all subsequent correspondence, the printing blocks and the fees.

8. Branch Offices must keep a record of all their transactions connected with trade marks.

9. Applications in respect of trade marks registered abroad must be accompanied by a certified copy of the entry in the Foreign Register.

10. On application for the renewal of registration, the original certificate must be produced. If extension has been granted abroad, documentary proof of this having been done must be handed in.

11. Should any forms have been improperly made out, the Head Office shall fix a time within which they must be corrected and sent in again.

12. Failure to do so in the given time, in accordance with the Provisional Regulations, due consideration being had for distance and other contingencies, will involve the rejection of the application.

13. If an application is in order, registration will at once ensue and the applicant be duly informed. On receipt of such notice, the applicant will, within a given time fixed by the Registrar, pay his fees, return the notice and hand in a block of his trade mark either to the Head Office or Branch Office.

14. When this shall have been done, the Head or Branch Office will affix to the notice a stamp, intimating that all formalities have been complied with, and return it to the applicant. Any action of this kind being taken by a Branch Office must at once be reported to the Head Office.

All blocks must be forwarded monthly to the Head Office, so that the marks may be printed in the Gazette. Similarly all fees must be remitted at the end of every month.

15. When the applicant shall have complied with the terms of para. 2 of Rule 13, the Registrar will register his mark and issue him a stamped certificate.

16. The block which may be either of wood or metal must not exceed more than four inches in length, three inches in breadth, and ·75 of an inch thick.

17. All objections lodged in terms of Provisional Regulation No. 13 must be in duplicate. The grounds of objection must be clearly stated and any material evidence available must be adduced.

18. In the case of an objection being raised, the Registrar will retain the original plaint, send the copy to the defendant and fix a time for the latter to defend his case. The decision will be given after a hearing of both parties.

19. If the Registrar has to cancel registration of a mark if the owner does not desire any longer to use a mark, or ceases to do business, the certificate must at once be returned.

20. On the death of an owner, should his next of kin wish to retain his rights of ownership, they must send adequate proofs of their rights of succession to the Registrar, and apply for a fresh certificate.

21. In the event of a transfer of rights, or of admitting a partner in the rights of ownership, as provided for in Provisional Regulation No. 11, a joint application, signed by both parties, must be sent in, accompanied by the original certificate of registration and a copy of the agreement (between the parties). In the case of trade marks registered abroad, the application must be accompanied by a certified copy of the extract from the Foreign Register.

An entry will then be made in the register and an endorsement on the back of the certificate.

22. Changes of residence on the part of the owner of a trade mark, or of his representative, must, in all cases, be promptly reported.

23. All applicants must specify to which of the hereinafter mentioned classes or sub-classes their goods belong. If they are unable to do so, the Registrar will determine the point.

Appendix M.

Proposed Commercial Mission to Persia.

CHAMBER OF COMMERCE,
BOMBAY, 13*th June* 1904.

THE SECRETARY,
MILLOWNERS' ASSOCIATION,
BOMBAY.

DEAR SIR,

The Committee of the Bombay Chamber of Commerce have for some time been in correspondence with the Government of India on the subject of a proposed Commercial Mission to Persia.

A further communication has now been received from Government, and in handing you a copy of same, I am to say that the Committee will be pleased to be favoured with any suggestions which may occur to you with a view to facilitating the work of the Mission in the direction of developing trade between India and Persia.

I am at the same time to invite you to depute two representatives of your Association to join a Sub-Committee which has been appointed to consider the matter.

As the Government of India desire an early reply, I am to beg that this communication may receive your early consideration.—I am, &c.,

C. J. MICHAEL,
Asst. Secretary.

No. 1774-E. A.

FROM THE DEPUTY SECRETARY TO THE
GOVERNMENT OF INDIA
IN THE FOREIGN DEPARTMENT,

To F. NOEL-PATON, ESQ.,
SECRETARY, BOMBAY CHAMBER OF COMMERCE.

Dated SIMLA, *the 2nd June* 1904.

SIR,

I am desired now to address you again, with reference to the correspondence ending with your letter of the 10th December, on the subject of the proposed Commercial Mission to Persia.

2. In that letter you implied that, if it were contemplated that the Mission might last for six months, the representative whom your Chamber had thought of deputing would be unable to accompany the Mission. Since that time the proposed scheme of the Mission operations has been further considered, and it has been decided that the Mission, if sent, should be purely commercial in character; there is, therefore, no necessity for attaching an Engineer Officer to

the party, and the delegate or delegates will be selected solely on the grounds of their interest in trade and knowledge of trade requirements. The Upper India Chamber of Commerce has also asked to be associated with the Bengal and Bombay Chambers, and His Britannic Majesty's Consul at Kerman has submitted certain suggestions; and I am now to refer these suggestions for consideration, and to invite the co-operation and advice of your Chamber in elaborating a scheme which, it is hoped, may lead to practical advantages to Indian trade.

3. In the first place, as to the itinerary to be followed, it is now proposed that the Mission should reach Bunder Abbas, their starting point, about the end of September, and after a short halt strike northwards to Saidabad in Sirjan, thence to Bahramabad in Rafsinjan, the chief centre of the cotton trade of the province, and a place of considerable importance, and from there to Kerman, where the best means of developing trade and commerce could be investigated. From Kerman it is suggested that the Mission should proceed to Bam and Narmashir, an important centre on the Bunder Abbas-Seistan trade route, and thence, taking the Gishu Pass *en route*, to the fertile valley of the Bampur River. The return journey, if time permitted, might usefully take the line *viâ* Magas, Kuhak and the Kej valley to Gwadur or Pasni.

4. The Government of India would wish to be guided, so far as the *personnel* of the Mission is concerned, by the advice and wishes of the representatives of the commercial community; and I am to ask that your Chamber may be moved to take this matter especially into consideration, even though it might not be possible for you to appoint a delegate. A tour, such as has been sketched out in the preceding paragraph, might, as it stands, occupy nearly six months; but it could, perhaps, be curtailed if this course were found, with reference to the desirability of securing the services of a particular individual, to be preferable. His Britannic Majesty's Consul at Kerman, basing his advice on information given to him by Mr. Ardeshir Edalji, the Kerman Agent of the Parsis, reports that Parsi merchants are beginning to take a considerable interest in the development of South-Eastern Persia, and he suggests that possibly some Parsi capitalist might either accompany the Mission, or depute an Agent on his behalf. Similarly, the Chamber might be able to indicate other branches of the community, whose interest in the trade and trade developments of South-Eastern Persia might cause them to desire to be represented in the enquiry.

5. A copy of this letter is being sent to the Chambers of Commerce at Calcutta, Karachi, and Cawnpore; and I am to suggest that, in view of the far-reaching importance to Indian trade of the subject with which it deals, your Chamber may be moved to place themselves in communication with those bodies, and that your views may be communicated at an early date, in order that, if there is a prospect of some practical scheme being evolved, there may be time to make preparations for facilitating the progress of the party.—I have, &c.,

S. M. FRASER,
Deputy Secretary to the Government of India.

MILLOWNERS' ASSOCIATION,
BOMBAY, 22*nd June* 1904.

THE SECRETARY,
CHAMBER OF COMMERCE,
BOMBAY.

DEAR SIR,

Commercial Mission to Persia.

I am instructed to acknowledge the receipt of your letter of the 13th instant, and to say that Mr. Sassoon J. David and Mr. S. A. Nathan have been deputed to represent the Bombay Millowners' Association on the Sub-Committee appointed by the Chamber to consider the above matter—I have, &c.,

C. J. MICHAEL,
Assistant Secretary.

CHAMBER OF COMMERCE,
BOMBAY, 18*th August* 1904.

THE CHAIRMAN,
MILLOWNERS' ASSOCIATION, BOMBAY.

DEAR SIR,

Commercial Mission to Persia.

With reference to the meeting held in the rooms of the Chamber of Commerce on the 30th June last, at which you and Mr. Nathan were present on behalf of the Bombay Millowners' Association, I now beg to inform you that the Committee have been in negotiation with Mr. Dunjishaw Muncherji Kapadia and Mr. R. P. Massani (of the Municipal Corporation) with the view of their proceeding to Persia as delegates on behalf of the Chamber and the two Associations represented at the above meeting, and that as these gentlemen have consented to accompany the Mission, the Committee propose to submit their names for the consideration of the Government of India.

As to the question of expenditure, the Committee are writing to the Native Piece-Goods Merchants' Association asking if they will contribute one-third, and as the total sum is not likely to exceed Rs. 6,000, the contribution already promised by your Association will fully cover your share.

As the matter is urgent and the Government of India are pressing for a very early reply, I shall be obliged if you will let me know, not later than Monday, the 22nd instant, whether your Committee approve of the two delegates selected by the Chamber.—I have, &c.,

C. H. ARMSTRONG,
Chairman.

MILLOWNERS' ASSOCIATION,
BOMBAY, 23*rd August* 1904.

THE HON'BLE MR. C. H. ARMSTRONG,
CHAIRMAN, BOMBAY CHAMBER OF COMMERCE.

DEAR SIR,

Commercial Mission to Persia.

I beg to acknowledge the receipt of your letter of the 18th instant, which has been submitted to the Committee of the Bombay Millowners' Association.

In reply I am to say that the Committee approve of the two gentlemen, *viz.*:—

Mr. Dunjishaw Muncherji Kapadia, and

Mr. R. P. Massani,

selected by the Chamber to accompany the Commercial Mission to Persia as delegates on behalf of the Bombay Chamber of Commerce and the Millowners' Association.

At the same time my Committee desire it to be clearly understood that the Association's contribution towards the expenses shall not exceed Rs. 2,000—I have, &c.,

SASSOON J. DAVID,
Chairman.

CHAMBER OF COMMERCE,
BOMBAY, 9*th September* 1904.

THE CHAIRMAN,
MILLOWNERS' ASSOCIATION,
BOMBAY.

DEAR SIR,

Commercial Mission to Persia.

With reference to previous correspondence, I am directed to inform you that intimation has been received from the Government of India to the effect that arrangements are being

made for this Mission to leave India at the beginning of next month (October). The delegates appointed on behalf of the Chamber and the Millowners' Association have been instructed to make the necessary preparations and to be in readiness to start as soon as the date of departure has been definitely fixed. I am directed to say that if there are any special points on which your Association would desire information during the progress of the Mission, the Committee would be obliged if you would favour them with a memo. of same as early as possible—I have, &c.,

C. J. MICHAEL,
Assistant Secretary.

CHAMBER OF COMMERCE,
BOMBAY, *3rd October* 1904.

THE CHAIRMAN,
MILLOWNERS' ASSOCIATION,
BOMBAY.

DEAR SIR,

Commercial Mission to Persia.

Referring to previous correspondence, I am instructed by the Committee of the Bombay Chamber of Commerce to say that as the extent of their liability is indefinite and the Government of India are unable to undertake the management and responsibility, the Committee have decided to withdraw from this Mission and have informed Government accordingly—I am, &c.,

C. J. MICHAEL,
Assistant Secretary.

Appendix N.

Conference of Chambers of Commerce of India and Ceylon.

Telegram, dated 19th December 1904, from the Bombay Millowners' Association to the Bengal Chamber of Commerce :—

"Conference. Find it generally assumed that Millowners' Association will be represented at Conference. Such representation most desirable if decisions on industrial questions are to carry weight. Please telegraph whether representative may be deputed."

MILLOWNERS' ASSOCIATION,
BOMBAY, *17th December* 1904.

THE SECRETARY,
BENGAL CHAMBER OF COMMERCE,
CALCUTTA.

DEAR SIR,

In accordance with the instructions of the Committee of the Bombay Millowners' Association, I have this day telegraphed to you as follows :—

> "Conference. Find it generally assumed that Millowners' Association will be "represented at Conference. Such representation most desirable if decisions on "industrial questions are to carry weight. Please telegraph whether represen- "tative may be deputed."

The Committee of the Association are moved to make this request for representation at the Conference by consideration of the fact that resolutions dealing with various industrial matters in which they are deeply concerned and thoroughly experienced are to be submitted at

the Conference, and that the decisions to be arrived at on these questions would, to a considerable extent, be discounted and discredited if it were known that a body of the standing of this Association had been excluded from the deliberations. It appears, moreover, to be generally assumed that the Association will participate, and they have been invited by a Chamber of Commerce to second one of the resolutions included in the programme.

My Committee feel sure that the circumstance of their having received no invitation to participate has been due to a mere oversight ; and they recognise that your Chamber may reasonably have expected that some movement in the matter should be made by my Committee at an earlier stage. But as a matter of fact they had no information about the arrangements being made for the Conference till the recent publication of the programme.—I am, &c.,

FREDERICK NOEL-PATON,
Secretary.

Telegram, dated 20th December 1904, from the Bengal Chamber of Commerce to the Chairman, Millowners' Association :—

" Conference. Your message, seventeenth. Provided Mill representative deputed as delegate Bombay Chamber, Committee agree. Conference for Chambers only."

No. 122-C.C.C.

BENGAL CHAMBER OF COMMERCE,
CALCUTTA, 20*th December* 1904.

THE CHAIRMAN,
MILLOWNERS' ASSOCIATION,
BOMBAY.

DEAR SIR,

Conference of Indian and Ceylon Chambers of Commerce, 1905.

I duly received your telegram of 17th instant as follows :—

Telegram begins :—" Conference. Find it generally assumed that Millowners' Association will be represented at Conference. Such representation most desirable if decisions on industrial questions are to carry weight. Please telegraph whether representative may be deputed." *Telegram ends.*

After consultation with the Committee of the Chamber, I wired you this evening as follows :—

Telegram begins :—" Conference. Your message seventeenth. Provided Mill representative deputed as delegate of Bombay Chamber, Committee agree. Conference for Chambers only." *Telegram ends.*

As the Conference is essentially a gathering of Chambers of Commerce only, it would not be possible to give your Association *locus standi* as such, but there will be no objection to your representative coming as a delegate of the Bombay Chamber of Commerce, provided he can be nominated as such by that Chamber—I have, &c.,

W. PARSONS,
Secretary.

MILLOWNERS' ASSOCIATION,
BOMBAY, 27*th December* 1904.

THE SECRETARY,
BENGAL CHAMBER OF COMMERCE,
CALCUTTA.

DEAR SIR,

I am directed by the Chairman, Bombay Millowners' Association, to acknowledge the receipt of your telegram and letter of the 20th instant, and to say that my Committee do

not consider that any useful purpose would be served by their attending the Conference on the footing proposed to them. I am to add that a further communication will probably be addressed to you when it has been possible to discuss the matter fully in Committee.—

I have, &c.,

FREDERICK NOEL-PATON,
Secretary.

MILLOWNERS' ASSOCIATION,
BOMBAY, 30*th December* 1904.

THE CHAIRMAN,
BENGAL CHAMBER OF COMMERCE,
CALCUTTA.

DEAR SIR,

Conference of Chambers of Commerce of India and Ceylon.

At a meeting of the Committee of this Association held to-day your letter, dated the 20th instant, in which you intimate that the forthcoming Conference at Calcutta is restricted to Chambers of Commerce only, and that therefore a representative of our Association could not be present and vote thereat unless he were nominated and delegated by one of the Chambers, was laid before the members of the Committee, and it was resolved, while thanking you for your letter, to reply to it to the following effect :—

I have to point out that since one of the rules of the Conference is that each Chamber can give only one vote irrespective of the number of its delegates such representation as you propose would be valueless to the Association, and on these terms they prefer not to be represented. They consider that if the Conference had proposed to deal only with subjects in which commerce proper or the distribution of commodities was concerned and not with questions relating primarily to industries and manufactures, no objection could have been taken to the constitution of the Conference as it now stands. On the other hand if the Associations representing Indian industries and manufactures had been invited to participate in the discussion of questions affecting their large interests, the pronouncements of the Conference on such questions might have been accepted as authoritative and have claimed a certain assent from all parties. But several of the resolutions to be discussed at the Conference deal with matters that concern Indian industries almost exclusively, and yet those persons, who are by experience most thoroughly qualified to say how those industries would be affected by the measures proposed, are excluded from the deliberations affecting their interests. This being the case our Committee submit with due respect that no pronouncement upon these matters made by a Conference of Chambers of Commerce as constituted in India, and from which the representatives of the Indian industries are excluded, can claim to be authoritative or responsible.

In the opinion of our Committee the time has gone past when it was harmless or permissible for Chambers of Commerce to ignore the distinctive position that Indian industries have acquired and to claim the right to dispose of and pronounce upon matters affecting the interests of manufacturers.

The Industrial Associations of India have, so far as our Committee are aware scrupulously abstained from concerning themselves with matters that fall more particularly within the province of the Chambers of Commerce as constituted in India, and the Bombay Millowners' Association regret the more that their exclusion from the deliberations and from the voting of a Conference which claims authority to make pronouncements upon matters that fall in clearly within the province of manufacturers, should now compel them to take steps to record and make known their formal protest against the Conference laying any claim to such authority.

In conclusion, I am requested to ask you to be so kind as to lay this letter before the Conference with a view to define their position as regards future Conferences, and also to forward you copies of this correspondence for favour of distribution to the delegates. In doing so I may direct attention to the fact that one Chamber of Commerce has invited the Association to second a resolution to be proposed by it, evidently assuming that the Association would be represented; while another Chamber has, since this question arose, telegraphed to say that they support the request of the Association for representation.—I am, &c.,

SASSOON J. DAVID,
Chairman.

C. J. MICHAEL,
Assistant Secretary.

BENGAL CHAMBER OF COMMERCE,
CALCUTTA, 31*st December* 1904.

No. 145 C. C. C.

THE SECRETARY,
THE MILLOWNERS' ASSOCIATION,
BOMBAY.

DEAR SIR,

Conference of Indian and Ceylon Chambers of Commerce, 1905.

I duly received your favour of 17th December 1904, confirming your telegram of same date on the subject of the representation of your Association at the approaching Conference. I placed this letter in due course before the Committee of the Chamber, but deferred replying to it until I received a further communication from you in reply to my telegram of 20th instant. This has reached me this morning and I note that your Committee do not consider that any useful purpose would be served by representation at the Conference on the footing proposed to them.

I am instructed to say that after giving their most careful consideration to this matter, the Committee cannot see their way to any other action, than that they have already taken, as the Conference is essentially one for Chambers of Commerce only and to depart from this principle would be to admit the right of independent representation on the part of other similar Associations of which there are several in connection with this Chamber. The Indian Jute Mills' Association, the Indian Mining Association and the Indian Tea Association might equally claim a right to direct representation; but if such claims were admitted, the Conference would cease to be what it is, a Conference of Chambers of Commerce.—I have, &c.,

W. PARSONS,
Secretary.

Appendix O.

Income Tax and the Depreciation on Factory Buildings.

MILLOWNERS' ASSOCIATION,
BOMBAY, *7th March* 1904.

THE COLLECTOR OF INCOME TAX,
BOMBAY.

SIR,

With reference to the correspondence ending with your letter No. 4423, dated 14th December 1903, and to my subsequent interview with you on the subject of the refusal of Government to allow any deduction on account of depreciation of factory buildings to be made

in Bombay in calculating the amount of Income assessable to Income Tax, I am now directed by the Committee of the Millowners' Association to let you know that on enquiry they find that in asserting that such deduction was allowed in England, they were in error. I am to express the regret of the Committee that they should have been misled upon an important point of this nature, and to explain that the circumstance of their having been induced in this instance to dispense with their customary verification of such points before using them arose from their being very expressly assured by one of their own members that you had yourself admitted the fact.

2. I am directed to hand you copies of two letters from leading firms in the United Kingdom which leave no doubt that such deduction is not in fact allowed in England. On the other hand the Committee find that in Calcutta a deduction of 5 per centum is allowed in respect of depreciation on Mill buildings and machinery, renewals of machinery, etc., being included in such deduction. I am instructed to lay a certain stress upon this fact.

3. But while on the one hand my Committee were not in the first instance induced to take up this matter by consideration of advantages enjoyed or understood to be enjoyed in other parts, but because of the evident injustice of the practice observed in Bombay; so they do not conceive that questions of fact as to the procedure adopted elsewhere in any way affects the considerations of principle which I had the honour to submit to you, for communication to Government, in the latter part of my letter of the 11th December last.

4. It was there stated that "They (the Committee) desire me, however, to refer to the broad principle laid down by the Government of India for the guidance of the Local Governments, namely, that in determining the net income assessable to Income Tax, allowance should be made for such charges as are necessarily incurred for the purpose of deriving the income, and for the purpose of providing against the destruction of the capital from which such income is derived. My Committee think it will not be denied that buildings in India, and especially mill buildings subjected to continual vibration and traffic undergo a deterioration that will not be covered by an allowance of 2½ per cent. It is equally clear that such deterioration is in fact a destruction of capital and that the repair of this deterioration is perfectly indispensable to the continued deriving of the income. My Committee are unable to imagine on what principle a provision against inevitable destruction of capital by the process of deterioration should be denied an exemption which is accorded to a provision against a possible destruction of capital by fire. My Committee consider that the present system puts a premium upon bad finance as well as subjecting them to a charge that is absolutely and relatively unjust. They accordingly direct me to beg that you will be good enough to refer the question again to Government for reconsideration."—I have, &c.,

FREDERICK NOEL-PATON,
Secretary.

21st January 1904.

MESSRS. N. WADIA & SONS,
BOMBAY.

DEAR SIRS,

In reply to your favour of the 26th ultimo, respecting the deduction of depreciation in connection with the assessment of Income Tax, we beg to state that no deduction whatsoever is allowed in Great Britain for depreciation of buildings.

Most, if not all, factories set aside a certain amount for this purpose, but this amount is not allowed by the Income Tax Commissioners and has consequently to be added to the profits, along with several other items, in making up the Income Tax assessment.

With regard to the depreciation of machinery it is different—a percentage is allowed here to meet this charge. This amount varies in different trades and also in different parts of the country even for the same trades. The fixing of the percentage is in the hands of the local

commissioners who rate it at what they consider to be a reasonable amount for "wear and tear." Naturally different commissioners take different views as to what constitutes reasonable "wear and tear." The law on the point is as follows—Clause 18 in the Act of 41 Vict., C. 15, "Notwithstanding any provision to the contrary contained in any Act, relating to "income tax, the commissioners for general or special purposes shall, in assessing the profits "or gains of any trade, manufacture, adventure, or concern in the nature of trade, "chargeable under Schedule (D), or the profits of any concern chargeable by reference "to the rules of that Schedule, allow such deduction as they may think just and reasonable as "representing the diminished value by reason of wear and tear during the year of any machinery "or plant used for the" purposes of the concern, and belonging to the person or company "by whom the concern is carried on." And by a further provision of the same Act the above regulation applies to persons or companies hiring machinery upon lease, on the terms that they are bound to deliver it over in good condition on the expiry of the lease. We may further say upon this question that the difference of opinion amongst the district Commissioners as to what constitutes a reasonable percentage for "wear and tear," gives rise to a certain amount of irritation amongst manufacturers in this country. In the district of Middleton of which Oldham is the chief town, the practice is to allow 7½ per cent. for depreciation of machinery in cotton factories, and this amount may be claimed for income tax purposes even if the full 7½ per cent. is not deducted in actual business.

In reply to your third question the Act of 1842, Section 100 allows for deduction for repairs of premises occupied for the purpose of the trade or manufacture, and for the supply or repair of implements, utensils or articles employed, not exceeding the sum usually expended for such purposes according to the average of the three years preceding.

We believe, however, that in actual practice the yearly cost of *bona fide* repairs to both buildings and machinery is allowed in addition to the percentage of depreciation of machinery. The term "machinery" in this district is understood to include Steam boilers and engines, millwrighting and shafting, &c., in addition to the spinning or weaving machinery proper.

We take it to be that the general principles underlying the foregoing regulations from the Board of Inland Revenue's point of view, are that buildings which are kept in good repair do not wear out, but that machinery and plant, even when kept in good repair and condition, in course of time become out of date and obsolete and have to be replaced, to meet which contingency a depreciation fund is reasonable and necessary.

We trust this reply satisfactorily disposes of your questions, if we can be of further assistance to you in the matter we shall be happy to provide you with any other information in our power.

We may say that probably the best book dealing with the income tax in this country is "A Guide to Income Tax Practice" by Adam Murray and Roger N. Carter, published by Gee and Co., price 10/-.—We have, &c.,

---

18th January 1904.

MESSRS. N. WADIA AND SONS,
CUMBALLA HILL,
BOMBAY.

DEAR SIRS,

We duly received your letter of the 26th December which we handed over to our Accountants, who are better versed in these matters than we are, and we enclose you herewith a copy of their reply, which we trust will answer your requirements. Should you require any further information, we should be pleased to endeavour to obtain it on hearing from you.

I have, &c.,
for HICK HARGREAVES & Co., LD.,
A. REASON,
Secretary.

H. A.

COPY OF LETTER RECEIVED FROM MESSRS. P. & J. KEVAN,

12, ACRESFIELD, BOLTON, *dated 18th January* 1904.

DEAR SIRS,

Income Tax Assessments—Spinning and Weaving Mills.

We duly received your favour of the 15th instant, enclosing letter from Messrs. N. Wadia and Sons, Bombay, with reference to depreciation allowed in this country on the above

As to Buildings.	One-sixth of the gross assessment for rating purposes is allowed off Schedule " A " for Repairs.
As to Engines, Boilers, Gearing, Pipes and Sprinklers.	Five per cent. is allowed off the reduced value, *viz.*, the first cost, less the depreciation from year to year.
As to Machinery and Utensils.	7½ per cent. is allowed off the reduced value.

All Repairs as distinguished from Renewals are allowed to be charged to Profit and Loss Account.

The above are allowed by the Local Commissioners but the Special Commissioners, *i.e.*, the Somerset House people, do not allow a greater depreciation than 5 per cent.

We think we have replied to Messrs. Wadia and Sons' questions, but should they require any further information on the matter, we shall be very pleased to give them the benefit of our experience at any time.

We return Messrs. Wadia and Sons' letter.—We are, &c.,

P. & J. KEVAN.

No. 6015 OF 1903-1904.

INCOME TAX OFFICE,
24, ESPLANADE ROAD,
BOMBAY, *9th March* 1904.

To

THE SECRETARY,
MILLOWNERS' ASSOCIATION,
BOMBAY.

SIR,

I have the honour to acknowledge the receipt of your letter dated 7th instant, and to inform you that the points therein raised will receive my careful attention.

2. I shall thank you to favour me with a copy of the last annual report of the Millowners' Association.—I have, &c.,

H. C. COORLAVALA,
Income-Tax Collector, Bombay.

Appendix P.

Registration of Trade Marks.

MILLOWNERS' ASSOCIATION,
BOMBAY, *2nd February* 1904.

MESSRS. CRAIGIE, LYNCH & OWEN,
Solicitors,
BOMBAY.

DEAR SIRS,

Registration of Trade Marks.

I am directed by the Committee of the Millowners' Association to refer the following point to you for favour of your opinion and advice :—

The Association fully recognises that registration of a trade mark with the Association does not confer or constitute any right of user not otherwise existent and has effect only as presumptive evidence of such a right;

They also recognise that the absence from the register of a particular trade mark used by a member cannot, except in the sense above stated, affect such right at law as may be possessed by that member as towards some one who is not a member or conversely the right of a non-member as towards a member.

But as between members of the Association it is agreed that priority of registration by one member with consent of the other members establishes a right of user (see Rule 3) and rule 4 *et seq* provide for resort to arbitration in event of a dispute.

But in the rules there is nothing about a non-member who, already possessing rights which he is not prepared to submit to any arbitration, desires to become a member. What would be his position in respect of the trade marks which he has been accustomed to use? If he signs the Form of Adherence prescribed under Rule V, he is bound to go to arbitration and it is found that signature of the Form is therefore refused in some cases. None of his trade marks (though they may have been habitually used by him) are on the register. At present I take it therefore that any trade mark he may send in must be treated as for "Primary Registration" and submitted under Rule 2 to the possible objections of other members, any such objection imposing on him the obligation to go to arbitration under Rule IV.

I am to say that at the time of preparing these rules this point was not contemplated, and so far as is known it is not provided for.

On the one hand, it is useless, and not desired, that the Association should pretend to create or limit any absolute rights at law which are constituted by factors entirely outside its control.

On the other hand it is undesirable that a manufacturer should at the time of his first becoming a member have power to put on the register trade marks to which he might not be able to make good any claim at law.

There appear to my Committee to be three courses open :—

(1) To impose on a joining member a strict compliance with the rules as they stand. This would prevent many persons from joining and might lead others who are already members in respect of some of their mills to resign membership rather than sign a Form of Adherence which imposes obligation in respect of any other mills managed or owned by them.

(2) To make a new rule whereby a member joining under the circumstances stated might before signature of the Form of Adherence send in his trade marks with proof of their having been habitually used for a specified period ; and might then sign and join on his being informed that the Committee and those members who might otherwise have been disposed to object to his trade marks are satisfied with the proof and recognise his right of user. But, if an old member maintained an objection and the new member refused to go to arbitration a dead-lock would exist.

(3) To make a new rule under which a new member might be permitted to sign a modified Form of Adherence under which he should not be bound to go to arbitration in respect of any such of his old trade marks sent in at time of his joining, as might be objected to by another member. He should be required to send in at time of joining all those old trade marks in respect of which he claimed such exemption. These trade marks would be circulated in accordance with Rule 2. Such as were not challenged would be put on the Ordinary register. Such as were challenged would be put on a special register and in respect of these he should not be required to go to arbitration. The Committee understand that it would then be incumbent on the objector to take immediate steps at law, if he desired to make his objection good. If no such action were taken and intimated within a stated period, the registration of the trade mark in dispute would become absolute.

The Committee believe that the best solution of the difficulty will be found in the last of these three courses. It is in effect an agreement to leave outside the provisions of the rules a certain number of the cases in which they desired to provide against the possibility of litigation, but it is clear that certain joining members will not come in on any other terms.

I am to beg that you will let this matter have your consideration, and will be so good as to draft a rule in the terms you may think necessary. Any such rule as may be decided upon will have to be submitted at the next general meeting and for this reason the Committee will be glad to know your opinion as soon as possible.—I am, &c.,

FREDERICK NOEL-PATON,
Secretary.

Memo. by Secretary.

MILLOWNERS' ASSOCIATION,
BOMBAY, 18*th February* 1904.

THE COMMITTEE.

Registration of Trade Marks.

The Committee will remember that a difficult question connected with the registration of trade marks has been raised by the Muir Mills Company, as to the right of a newly-joining member to put his old trade marks on the register without submitting them to the possible objection of members and to possible rejection on arbitration, and that the question has been submitted to the Solicitors to the Association for consideration. No reply has yet been received; but the copy letter to the Solicitors is attached for reference.

Yet another question, and one which presents peculiar difficulties, arises where it is found that a Company which has for some time been a member of the Association has disregarded or overlooked the rule that all members should register with the Association "all the trade marks and tickets to which they lay claim." It must not be forgotten, as is often done, that this rule has existed since the 13th February 1886, and is not a new regulation introduced when the constitution and regulations of the Association were revised in 1903.

Most of the members now fully recognise the value of registration, and there is no reason to doubt that in many of the cases in which the rule referred to has not been complied with the omission has arisen from pure oversight and might never have been known to the present Managers of the Companies concerned, but for the active steps taken in connexion with the constitution of the new Register.

On the other hand it is evident that the only circumstances in which it would be to the advantage of a millowner to withhold a trade mark from registration and from the scrutiny involved in registration are precisely those in which it is most necessary that other members should have an opportunity of objecting to its use. If there were any member of the Association who, instead of seeking to make his trade marks as unlike as possible to those of other millowners, was disposed to imitate one that was already well-known in the market, it is probable that he would desire to elude the rule which binds him to submit every trade-mark to the examination of other members. It would therefore not be safe to assume that in every possible case omission to register with the Association arose from mere forgetfulness; nor would it be expedient to give to all members who had used trade-marks without registering them an absolute right to have them registered after they had been in use for some time. Such a provision might be abused.

The Committee will probably consider, however, that it is desirable to provide, so far as possible, for those cases in which the oversight has obviously been committed in good faith; and I submit the following draft rule as perhaps providing sufficiently for such cases.

My reason for alluding to the question of *newly-joined members* at the beginning of this letter is that I have so drafted the rule as to cover their circumstances as well as those of *old members* who have not registered all their trade-marks.

If the Committee approve of the draft rule as covering the cases both of old members and of newly-joined members, I shall be glad to have their instructions as to communicating it to the Solicitors in that sense for their final opinion.

DRAFT RULE.

E. If a new member after having signed the Form of Adherence prescribed under Rule V sends in for registration a trade-mark which he claims to have habitually used, but which trade-mark is in fact not on the old register, such trade-mark shall be subject to the procedure laid down under Rules 1 and 2 for primary registration. *Provided* always that if objection is taken to the registration of any such trade-mark or trade-marks on the ground that it is a colourable imitation of one already on the Register, and if the applicant for registration objects to arbitrate in respect of such trade-mark and produces evidence to the satisfaction of the Committee of the Association that the trade-mark so sent in for registration was, at a date prior to the coming in force of the present Rules of the Association on the 1st January 1904, habitually applied by him to the class or classes of goods for which he desires to register it, the Committee may, on the demand of the applicant, release him and the objector, so far as the particular trade-mark in question is concerned, from their respective obligations to submit all disputes with members to arbitration, and may relegate them to their rights and remedies at law. *Provided* further that on intimation being made to the parties that the Committee has so released them, it shall become incumbent on the parties either to take action at law within a period not exceeding fourteen days of the receipt of such intimation, or to compound and arrange the matter otherwise between them within the same period. Notification of the course pursued and of its result shall forthwith be made to the Association. If no such notification is received by the Secretary within one month, the trade-mark in dispute shall be admitted to the register; but if legal action is resorted to by either party, the result of such legal action shall be awaited and thereafter given effect to on such results being formally communicated to the Association.

I think it will be seen that the above draft rule would remove the objection of the Muir Mills and others to signing the Form of Adherence, seeing that as soon as they have signed it, they will become entitled to apply to the Committee for release from their obligation to arbitrate. The point is that there is no use in trying to force members against their immediate interests to submit old tickets to arbitration. The simplest way is to enable the Committee to place such tickets in special cases outside the rules. One thing is fairly certain that no member will claim this exemption, which involves a probable action at law, unless he really thinks the matter worth fighting about. And if no action at law is taken within a brief period after the matter is being brought to the knowledge of both parties, the right to take such action lapses, and the registration of the trade-mark may thereafter be safely made.

FREDERICK NOEL-PATON,
Secretary.

BOMBAY, 23*rd February* 1904.

TEH SECRETARY,
MILLOWNERS' ASSOCIATION,
BOMBAY.

DEAR SIR,

Registration of Trade-Marks.

We have now considered the observations made in your letter of the 2nd instant, as also the present rules and regulations of the Association, and have drafted a new Form of Adherence, and some rules to be added to the existing rules of the Association, and now beg to send you the drafts for your consideration.

As the matter is somewhat complicated and as the existing rules of the Association were settled by Counsel, we would suggest that the additional rules drafted by us should also be so settled.

With respect to a trade-mark claimed by a new member who refuses to refer to arbitration any dispute which may have arisen regarding it between himself and any other member or members, we think the position would be as you suggest, *viz.*, that unless the members who challenged the right by the new member to use such ticket took legal proceedings to make good their objection, they would, as against the new member, be taken to have abandoned their right to do so. Further, that any such proceedings if taken at all would require to be taken within a reasonable time after such member or members first became aware that the new member claimed the trade-mark as his property.

We are, Dear Sir,
Yours faithfully,
CRAIGIE, LYNCH & OWEN.

Memo. by Secretary.

BOMBAY, 24*th February* 1904.

Registration of Trade-Marks.

The reply of the Association's Solicitors to our letter of the 2nd current was received yesterday. In view of the facts that it does not deal with the further question raised in the memorandum of the 18th current (herewith re-circulated for reference), and that the minutes upon that memorandum suggest the desirability of referring the matter in the first place to a Sub-Committee, the undersigned will be indebted if the Committee will name two or three members to sit on such a Sub-Committee with instructions to make recommendations to the General Committee. It is desirable that the matter should be dealt with quickly, in order that there may be no delay in holding the Annual Meeting.

FREDERICK NOEL-PATON,
Secretary.

(RULES TO BE ADDED TO RULES AND REGULATIONS OF THE ASSOCIATION.)

XXIX. Notwithstanding anything contained in the foregoing Rules and Regulations or in the following Rules for Primary and Secondary Registration of Trade-marks it shall be open to any new member instead of signing the Form of Adherence contained in the foregoing Rule V to sign the Form of Adherence next hereinafter contained that is to say :—

In consideration of the protection afforded by the members of the Bombay Millowners' Association to the trade-marks and tickets used by me/us and in consideration of the general maintenance by the Association of the interest of the industry in which I am/we are engaged I/we engaged in in the town of having carefully read and fully understood all the rules of the said Association and the Rules relating to Registration of Trade-marks do hereby declare and agree that I/we will during my/our membership of the said Association in all things conform faithfully and absolutely to all the said rules and to such other rules as the Association shall institute by resolution duly passed in accordance with the relevant provisions herein that I/we will register with the Association all the trade-marks applied by me/us to any the produce of the mill or mills factory or factories owned by me/us that all such registered trade-marks so applied by me/us whether it shall be subject to the rules of the Association and I/we will submit to arbitration in accordance with the rules of the Association any dispute or disputes in which I/we may be concerned with another member or other members of the Association in respect of all or any trade-marks which I/we may tender for registration in the Ordinary Register of Trade-marks kept by the Association and that I/we will submit for registration in the special register of the Association provided for by Rule 15 of the Rules for Primary Registration of Trade-marks all trade-marks applied by

me/us before I/we became a member of the Association to any the produce of the mill or mills factory or factories owned by me/us and as to which trade-marks I/we am/are not willing to submit to arbitration any dispute or disputes that may arise between me/us and any other member of the Association.

(RULES TO BE ADDED TO RULES FOR THE PRIMARY REGISTRATION OF TRADE-MARKS.)

15. In addition to the Ordinary Register of Trade-marks in which Primary Registration of Trade-marks is effected, a special register of trade-marks shall be kept by the Association in which register, subject to the provisions of the next following rules, shall be entered all the trade-marks applied by a new member of the Association before he became such member to any the produce of the mill or mills, factory or factories owned by such member, and regarding which trade-marks such new member shall not be willing to refer to arbitration any dispute that may arise between such new member and any other member or members of the Association, provided however that no new member who shall not have signed the Form of Adherence as given in Rule XXIX shall be entitled to register any trade-marks in the special register. No new member who shall, in accordance with these rules, have signed the said last mentioned Form of Adherence and tendered a trade-mark or trade-marks for registration in the special register shall be bound to submit to arbitration under these rules any dispute which may arise between such new member and any other member or members of the Association with respect to such trade-mark or marks.

16. In case an objection shall be taken by any member within the month specified in the above rule 2 to the registration in the special register of any trade-mark tendered for registration in that register on the ground specified in the above rule 2, the registration of such trade-mark in the special register shall be postponed for one calendar month from the date when the objection was notified to the Secretary in writing. If at the expiration of such last mentioned month no legal proceedings shall have been taken by the objecting member to make good his objection or if any such proceedings having been instituted they shall have been discontinued or finally decided in favour of the member tendering the said mark for registration, then the mark objected to shall be registered in the special register. If any such proceedings shall be pending at the expiration of such month, then the registration of the mark objected to shall be postponed until the final termination of such proceedings, and if the said proceedings shall terminate in favour of the member tendering the said mark for registration, the said mark shall be registered in the special register, otherwise the same shall not be registered.

17. Prior registration of a trade-mark in the special register shall have the same effect as the prior registration of a trade-mark under the foregoing rule 3 for primary registration of trade-marks.

MILLOWNERS' ASSOCIATION,
BOMBAY, 11*th March* 1904.

SUB-COMMITTEE ON NEW RULE FOR REGISTRATION OF TRADE-MARKS.

In conformity with instructions given at yesterday's meeting, I have drafted the accompanying new Rules and the attached letter to the Solicitors. I have, as directed, made the rules applicable only to new members, but I would ask the Sub-Committee once more to consider the following points :—

It must be a prime object to make the register a true record of all the rights in trade-marks to which members are entitled in law. Take a specific instance. Messrs. . . . . have certain trade-marks which have been years ago objected to by another member and which have therefore not been registered. But no steps have been taken by the objector to make good his objection in law. Consequently Messrs. . . . . have used those tickets without hindrance for years, and I take it there can be no doubt that an attempt by the objector to stop them by legal proceedings would now fail. Here is a right at law which is not recognised in our register ; and personally I think that some procedure should be provided for bringing

such rights on to the register within a period to be fixed by the Committee. I am sorry to trouble the Sub-Committee again in this matter, but it is my duty to see that no point is overlooked.

FREDERICK NOEL-PATON,
Secretary.

MILLOWNERS' ASSOCIATION,
BOMBAY, 23*rd March* 1904.

MESSRS. CRAIGIE, LYNCH & OWEN,
SOLICITORS, BOMBAY.

DEAR SIRS,

I am directed by the Committee of the Millowners' Association to thank you for your letter of the 23rd ultimo, enclosing rules which you had kindly drafted on the instructions contained in my letter of the 2nd idem.

I am to say that the Committee attach great importance to dispensing with a distinct Form of Adherence for new members, and desire to be favoured with your opinion as to whether there is a clear necessity for such distinct form if the Committee be given power under a new rule to release members from their obligation to arbitrate in respect of particular matters. They do not themselves see why the giving of such power to the Committee should not be sufficient.

I am also to say that they fear they had not made clear the nature of the special register they proposed to constitute for marks, the subject of dispute. It ought to have been more clearly stated that registration in this special register was to be of a temporary nature pending the settlement of disputes.

With the guidance afforded by the draft furnished by you, I have, under the instructions of the Committee, drafted two rules which they believe would serve the purpose aimed at; and I am to forward them to you herewith for favour of your revision and advice. I am to add that if you consider them workable, the Committee will be glad if you will have them settled by Counsel as you proposed. You will probably find words and phrases used out of their strictly legal sense, and these they would beg you to rectify.

You will see that in the draft rules enclosed it has been assumed—

(*a*) that the present Form of Adherence will suffice;

(*b*) that the special register will be of the nature of a suspense register;

(*c*) that when the parties to a dispute are released from their obligation to arbitrate, either of them may take legal action against the other. It might happen that the new member did not know of the existence of the old member's mark until the objection was communicated to him, and that he might then desire to proceed against the objector whether or not the objector was on his side prepared to proceed. It is necessary to provide for this and for the contingency that the new member might succeed in depriving the old member of his right to use the mark already registered with the Association;

(*d*) that it is necessary, to enable an old member who has in good faith failed to register a trade-mark, to effect registration under safeguard.

The Committee are uncertain whether it is enough to allow one month for the institution of legal proceedings, and for this reason have suggested two months as an alternative. On this point they would be glad to have your opinion. All they desire is that within some reasonable time objections to registration should be settled one way or another.—I am, &c.,

FREDERICK NOEL-PATON,
Secretary.

P. S.—I am to say that as these new rules, if they are to be passed at the Annual General Meeting on the 15th April, must be printed and issued to members not later than the 8th idem, the Committee will be indebted if you can let them have early attention.

BOMBAY, 28*th March* 1904.

THE SECRETARY,
MILLOWNERS' ASSOCIATION,
BOMBAY.

DEAR SIR,

Re *Registration of Trade-Marks.*

Referring to your letter of the 23rd instant and our interview with you on Saturday last, we have settled, as altered in red ink, the draft rules sent by you, and now beg to return you the same.

Having regard to the draft rules and to the fact that the Committee are under the rules given power to release members from their obligation to refer particular matters in dispute to an arbitration (which power, we think, can be given to the Committee), we do not see any necessity for having a distinct Form of Adherence for new members, but think that it can safely be dispensed with.

As to within what time legal proceedings should be instituted by one party or the other to the dispute to make good his contention, we think the period of two months provided for by the additional rules will be sufficient and reasonable.

On your Committee approving the said draft rules, we will have the same settled by Counsel.—We are, &c.,

CRAIGIE, LYNCH & OWEN.

MILLOWNERS' ASSOCIATION,
BOMBAY, 29*th March* 1904.

MESSRS. CRAIGIE, LYNCH & OWEN.

DEAR SIRS,

Re *Registration of Trade-Marks.*

In thanking you for your letter of the 28th instant, together with its enclosure, I am directed to hand you a fair copy of the draft rules which you have kindly revised, and to ask you to kindly submit it to Counsel as early as possible.—Yours faithfully,

FREDERICK NOEL-PATON,
Secretary.

DRAFT RULES TO BE ADDED TO THE RULES OF THE MILLOWNERS' ASSOCIATION FOR THE PRIMARY REGISTRATION OF TRADE-MARKS.

15. Notwithstanding anything contained in the foregoing rules, or in the Form of Adherence prescribed under Rule V, a member who has signed such Form of Adherence may, when sending in any trade-mark or trade-marks for registration with the Association, declare that he is not willing to refer to arbitration any dispute or disputes that may arise between him and any other member or members of the Association with respect to any one or more of such trade-marks (to be specified by him) on the ground that he has habitually applied the same to any the produce of a mill or mills, factory or factories owned by him. Provided that in the case of a member who shall at any time after the passing of this rule have joined the Association for the first time, such declaration shall be made not later than one calendar month after his so joining the Association. Provided further that in the case of a member who first joined the Association at a date anterior to the passing of this rule, such declaration shall be made not later than the 31st of May 1904, and shall be valid only if it relate to a trade-mark or trade-marks which he is able to show to the satisfaction of the Committee of the Association that he had before the 1st January 1904 habitually applied to any the produce of a mill or mills, factory or factories owned by him.

16. Trade-marks in respect of which such a declaration shall have been made in accordance with the provisions of the foregoing rule 15 shall be subject to the procedure laid down in Rules 1 and 2 for Primary Registration. In case an objection in the terms of Rule 2 shall be made to the registration of such a trade-mark, the Committee shall, in the case where the mark objected to is claimed by a newly joined member, release the parties interested so far as the particular dispute in question is concerned from their obligation to refer such dispute to arbitration, but where the trade-mark objected to is claimed by an old member, the Committee shall grant such release on the production by such member of evidence satisfactory to the Committee of the Association that the trade-mark or trade-marks in question was or were before the 1st of January 1904 habitually applied by him to any of the produce of a mill or mills, factory or factories owned by him. When such release is granted, the fact shall forthwith be communicated by the Committee to the parties to the dispute or disputes, and the registration of the trade-mark or trade-marks in dispute in the Ordinary Register shall be postponed for a period of two calendar months from the date of such communication. The trade-mark or trade-marks so objected to shall, on the expiration of one calendar month from the date of the application to register the same, be temporarily registered in a special register to be called the Suspense Register. So long as any such trade-mark shall remain on the Suspense Register of the Association, priority of registration thereof on the Suspense Register shall have the same effect as prior registration under Rule 3 for Primary Registration in so far as it shall entitle the owner of such trade-mark to object in accordance with Rule 2 to the registration of any other trade-mark that may be submitted for registration. At any time within the aforesaid period of two calendar months any of the parties to any such dispute may take legal action in the matter, and the result of such legal action if so taken shall be awaited by the Association and shall be given effect to in the Ordinary Register of the Association on receipt of a demand to that effect made by any of the parties to such dispute, accompanied by sufficient evidence of the result of such proceedings. If in such proceedings any of the trade-marks in dispute shall be held to be a colourable imitation of another trade-mark registered with the Association, then the trade-mark so held to be a colourable imitation shall be removed from the Suspense Register or from the Ordinary Register as the case may be. If no legal proceedings in the matter shall be instituted by any of the parties within the aforesaid period of two calendar months, or if legal proceedings, having been instituted, shall have been discontinued or finally decided in favour of the applicant for registration, then the trade-mark objected to shall be removed from the Suspense Register and registered in the Ordinary Register of the Association, unless other legal proceedings regarding the same mark shall be still undecided.

17. A trade-mark which is so transferred from the Suspense Register to the Ordinary Register shall be deemed to have been registered in the Ordinary Register as of the date when such trade-mark would have been registered therein had no objection to the registration thereof been taken.

BOMBAY, *5th April* 1904.

THE SECRETARY,
THE MILLOWNERS' ASSOCIATION,
BOMBAY.

DEAR SIR,

Re *Registration of Trade Marks.*

Referring to your letter of the 29th ultimo we herewith beg to send you a fair copy of the proposed additional Rules as settled by the Advocate General.

As to the efficacy of the proposed Rules the Advocate General writes 'I have settled the proposed additional Rules. They appear to me calculated to effect the purpose which the Association have in mind.'

We are, &c.,
CRAIGIE LYNCH & OWEN.

Appendix Q.

Electric Power Project.

OFFICE OF THE SUPERINTENDING ENGINEER,
WESTERN CIRCLE,
BANGALORE, *dated 21st May* 1904.

FROM
MAJOR A. J. DELOTBINIERE, R.E.,
SUPERINTENDING ENGINEER, WESTERN CIRCLE.

To
THE SECRETARY,
BOMBAY MILLOWNERS' ASSOCIATION, BOMBAY.

SIR,

I take the liberty of enclosing 20 copies of my Circular letter No. 1, dated 20th May 1904, for favour of circulation amongst your friends. This letter will explain the work which I have now in hand. It appears to me that the Millowners of Bombay might consider it worth their while to open Branch mills at some points near the source of power, say, within a radius of 100 miles of the Periyar Dam in the event of my being in a position to give them Electrical Power at a very cheap rate.

Points such as Madura, Tinnevelly, Tuticorin, Dindigul, Trichinopoly and Coimbatore, could all be supplied with Electrical Power from the Scheme if sufficient demand existed. You will understand that the closer the mills are situated to the Periyar Dam, the less the power will cost.

I trust that you will give this matter your consideration and let me have your views on the subject which would be of greatest value and assistance to me.—I have, &c.,

A. J. DELOTBINIERE, MAJOR, R.E.,
Superintending Engineer, Western Circle.

CIRCULAR LETTER No. 1.

BANGALORE, *Dated 20th May* 1904.

FROM
MAJOR A. J. DELOTBINIERE, R.E.,
SUPERINTENDING ENGINEER, WESTERN CIRCLE,
BANGALORE.

SIR,

I have been entrusted by the Madras Government with the preparation of a scheme for the generation and utilization of electrical power from the Periyar Project for industrial purposes in Southern India.

2. It is hardly necessary for me to point out to practical men that the first consideration in any scheme of the sort is **a market for the power.**

3. To arrive at an idea of the probable demand, I propose to collect as far as possible statistics of power actually employed at present and when possible estimates of requirements for extension of existing plants, and of new consumers.

4. As has been amply proved again and again in America, and on the Continent, and at the Kolar Gold Fields in this country, it is possible to supply electrical power generated by water at a considerably cheaper rate than that at which power from coal or oil can be generated, provided that the supply is on a sufficiently extensive scale, and that the distance from the source of power is not too great.

5. Cheap power needs no advocacy from me, I trust therefore you will assist me by filling in the attached forms and giving me any other information you think will be useful especially regarding new consumers.

6. In filling in the enclosed form which kindly return to me with the least possible delay, I would draw your attention to the notes below.

A. The introduction of electrical driving, in place of steam or oil engines, should not entail any interference with existing installations, the change would be made by simply placing a motor in such a position that the motor pulley can drive the shafting by ropes or belts.

B. In no case need the existing engines be removed. In the case of tramways, alternating motors, would be used to drive existing dynamos, and for electric lighting, the three phase alternating current supplied, would be used direct.

C. High Voltage three phase alternating current, between 25 and 60 cycles, will be employed for transmission purposes. This will be reduced to a medium voltage for local distribution in towns, and by means of secondary transformers on consumers' premises, the voltage will be still further lowered for driving motors, or lighting.

D. Induction Motors, by far the simplest electrical machine for power purposes, will be used.

E. By means of Rotary Converters or Motor Generators, direct current for trams or industrial purposes, &c., may be obtained.

F. The power will be available continuously day and night.

G. The whole plant, including transmission line, will be in duplicate, which should ensure an unfailing supply of energy to consumers.

7. Regarding the cost of power, this will naturally vary with the distance from its source. But if the demand is sufficient, I am in hopes of being able to offer electrical power, at from 15 per cent. below cost of steam in Madras, and from 50 to 60 per cent. below cost of steam at points situated within 100 miles from the power station.

The many advantages of electrical power, as compared with steam power, are too obvious to call for comment. It may, however, be stated, that manufacturers in other countries have in many cases adopted it, in districts where steam power could, on account of the cheapness of coal, be generated at less cost.

8. I may mention that this communication is not in any way official.

9. Trusting that you will give me your hearty co-operation in this matter, which, I anticipate, will lead to a great advance in the industrial development of the Presidency.—I have, &c.,

A. J. DELOTBINIERE,
Superintending Engineer, Western Circle.

MILLOWNERS' ASSOCIATION,
BOMBAY, *8th June* 1904.

MAJOR A. J. DELOTBINIERE, R.E.,
SUPERINTENDING ENGINEER, WESTERN CIRCLE,
BANGALORE.

SIR,

Under the instructions of the Committee of the Bombay Millowners' Association, I have the honour to acknowledge the receipt of your letter of the 31st May, accompanied by 20 copies of your circular letter respecting a scheme for the generation and utilization of electrical power from the Periyar Project for industrial purposes in Southern India. The Committee have perused the paper with much interest and they direct me to convey to you thanks for bringing the scheme to their notice.—I have, &c.,

C. J. MICHAEL,
Assistant Secretary.

Appendix R.

Moisture in Yarn.

NEW BEDFORD, MASS., *July 27th*, 1904.

THE SECRETARY,
COTTON SPINNERS' ASSOCIATION,
BOMBAY, INDIA.

DEAR SIR,

I have been requested by the New England Cotton Manufacturers' Association to prepare a paper on the subjects of the Standard of Moisture in Cotton and Cotton Yarns to submit to them at their next meeting. In this connection I desire to ascertain what are the regulations, if any, at the various Cotton Exchanges as to the maximum allowance for moisture in raw cotton; their by-laws or regulations bearing on this subject, or if there are no regulations, what is the custom in case of excessive moisture.

I should esteem it a favor if you would kindly give me what information you have on these matters, and send me a copy of any regulations that have been adopted by your Association.

Any information which you may supply will be appreciated by me, and by the other Members of our Association, and I shall take pleasure in sending you a copy of the report when printed by our Association.

Thanking you in advance.—I have, &c.,

C. P. BROOKS,
Member, Board of Government,
New England Cotton Manufacturers' Association.

MILLOWNERS' ASSOCIATION,
BOMBAY, 10*th September* 1904.

CHRISTOPHER P. BROOKS, ESQ.,
NEW BEDFORD, MASS., U. S., AMERICA.

DEAR SIR,

I am instructed to acknowledge the receipt of your letter of 27th July addressed to the "Cotton Spinners' Association, Bombay," but which presumably was intended for the Bombay Millowners' Association.

In reply I am to say that this Association has no rules on the subject of the Standard of Moisture in Cotton and Cotton Yarns. If, however, such regulations are in force on your side my Committee will be thankful if you will favour them with a copy of same together with information as to the mode of operation.—I have, &c.,

C. J. MICHAEL,
Assistant Secretary.

MOISTURE IN COTTON AND COTTON YARN.

New England Cotton Manufacturers' Association.

Advance copy subject to author's revision. Semi-annual Bretton Woods Meeting, No. 77, The Mount Washington, Sept. 21-22, 1904. This paper is printed in advance for the convenience of the members in their discussion of the subject, and also to enable it to be presented before the Association in abstract if time prevents its being read in full. The press are requested not to publish any part of it previous to its delivery, and the Board of Government desires that any subsequent publication **should be limited to abstracts and not to its use in full,** which is reserved for the "Transactions" of the Association.

MOISTURE IN COTTON AND COTTON YARN.

CHRISTOPHER P. BROOKS, New Bedford, Mass.

I understand that the subject of the Standards of Moisture in Cotton and Cotton Yarns has not previously been specifically dealt with before this Association. Not only are the records of previous meetings lacking in information on the subject, but it is one on which very little information has previously been published. As cotton possesses affinity for moisture to a considerable extent, and as a slight variation in the amount of water contained makes a great difference in the value of the enormous amount of cotton that is raised and manufactured in the United States, the absence of accepted standards and of reliable information is somewhat strange. In Europe the subject has received far more attention; standards of allowable moisture have been adopted for cotton, silk, wool, or flax, and the yarns made from same; in some countries even being made operative by law. As a rule, the statistical side of cotton manufacturing is more advanced in America, and mathematical data of all kinds regarding the material, the processes, and the products, of our mills is far more perfect than in Europe, but moisture standards and statistics have not received much attention. In these days of scientific manufacturing and standardization, and of careful and accurate calculations, it would seem appropriate that this subject should be discussed by the Association.

Before dealing with the question, it is necessary to refer to some of the physical properties of cotton, in order to lead up to the subject, and to summarize well-known information regarding the raw material.

The property of containing and retaining moisture, even when in an air dry condition, or hygroscopicity, is common to most of the commercial textile fibres, although cotton possesses this hygroscopic property to a smaller extent than most of the other fibrous materials. There is a quantity of water always present in cotton, which cannot be driven out by a moderate heat, and even after it has been expelled by excessive heat, it is replaced by moisture from the atmosphere when the superheated cotton is allowed to stand in the open air. When in an air dry state, under ordinary atmospheric conditions, cotton and cotton yarn contain about eight per cent. of moisture.

The expression "air dry" in this paper is to be understood as the condition of cotton or cotton yarn after it has been exposed to the atmosphere for such a length of time and under such conditions as will cause it to lose all excessive moisture or regain deficient moisture so as to be in a normal condition.

The expression absolutely dry cotton means cotton that has been heated to such a high temperature and under such conditions that all the moisture will have been expelled and the sample being tested will cease to lose weight.

Ignoring the removable foreign matter contained in raw cotton, such as sand and other mineral substances, leaf, pieces of boll, or stalk, and considering the fibre as entirely cleared from this removable material, it is found to be composed of cellulose, permeated by a small amount of mineral matter, each fibre being surrounded by soluble substances, present to the extent of one or two per cent. The small amount of mineral matter contained in the tissue of the fibre may be liberated by burning the fibre, the inorganic matter remaining as an ash retaining more or less the formation of the fibre and being about one per cent. of the original weight.

Cellulose is the largest constituent of the cotton fibre; in fact it is the chief constituent of almost everything of vegetable origin, but is found with its most characteristic features in such commercial fibres as cotton, ramie, flax, and so on. It is a carbohydrate, so called, because it is composed of carbon, hydrogen, and oxygen, the hydrogen and oxygen being present in the same proportion as in water. It is this cellulose that absorbs and retains moisture, the cellulose in the cotton fibre, when in an air dry condition, containing about seven and one-half per cent.

The soluble substances present in the cotton fibre, principally located on the outside, are waxy or oily substances permeated with other material and amounting in the aggregate to from one and one-half to two per cent. of the weight of raw cotton. The nature of these materials is yet more or less obscure; that portion which is removable by scouring with a weak solution of soda ash is commonly spoken of as cotton wax, while others removable by constant boiling in distilled water are given the name of water extract.

In this paper it is not the intention to dwell upon the properties of the cotton fibre, excepting so far as they affect the subject of moisture, but in this connection, the coating of the cotton fibre is especially interesting from the fact that it has been shown to have the property of containing and retaining as much as 29½ per cent. of its own weight in water. Therefore, although it is only present to the extent of one and one-half to two per cent., it is accountable for retaining water to the extent of about one-half per cent. of the whole weight of raw cotton.

The amount of removable foreign matter in cotton varies very greatly according to the variety, and even in different growths of the same variety. It is present to the extent of from one per cent. in carefully cultivated Sea Island, to six per cent. or more in coarse, negligently cultivated East Indian cotton. Assuming two per cent. as a fair average, we arrive at the following data as representing the constituent parts of what is commercially known as raw cotton. Of course no two analyses give the same result, and these figures only represent what would be found in an average of American grown cotton in an air dry condition :—

Cellulose...	87	per cent.
Waxy, or other easily soluble substances	2	„
Ash (Giving 90 per cent. of fibre if absolutely dry) ...	1	„
Removable foreign matter	2	„
Moisture...	8	„
	100	„

After the cotton is spun into yarn and the mineral substances that have no affinity for moisture removed, if the yarn is tested under the same atmospheric conditions as the sample of cotton, the percentage of moisture will be slightly greater, since the cellulose and other materials that have an affinity for moisture from a greater percentage of the whole; but this difference is so small that for present purposes we can ignore it and consider that raw cotton and the yarn spun from it have practically the same affinity for moisture.

The determination of the amount of moisture present is commonly spoken of as conditioning. The accurate meaning of this expression is the testing of raw stock, yarn, or fabrics as to what should be their true weight if the normal regain of moisture were added to their absolutely dry weight. From this expression the name "conditioning houses" has been derived to indicate those establishments, very common in Europe, where fibrous substances are tested as to their hygroscopic conditions. The meaning of the words "condition" and "conditioning" has been extended so as to cover tests as to numbers, strength, evenness, adulteration, and others beyond the original meaning of the word and it is even now used to cover the process of artificially adding moisture by various methods. These conditioning houses exist chiefly in those manufacturing centres of Europe where the more valuable textile fibres, such as silk and wool, are used; thirty-seven of these conditioning houses are in operation. I know of only two public conditioning houses in the United States—one in New York and one in Philadelphia. The largest one in existence is said to be that at Bradford in England, conducted by the city authorities under special parliamentary powers, where tests are made every year of samples representing over $35,000,000 worth of cotton, wool, silk, and other fabrics, yarns, and raw materials, or materials in process of manufacture.

The other large conditioning houses are at Manchester in England, Crefeld in Germany, Basle and Zurich in Switzerland, Lyons, Roubaix, and Paris in France, Milan and Turin in Italy, and others.

At all these the standard of moisture in cotton is what is known as an 8½ per cent. regain. This does not mean that every hundred pounds, or other units of weight of cotton, when in an air dry condition contains 8½ units of water. The meaning of the term is that if a sample of cotton or cotton yarn has been subjected to sufficient heat to render it absolutely dry, each 100 parts by weight when exposed to ordinary atmospheric conditions will regain 8½ parts. Thus, in a dry condition such a sample of cotton or cotton yarn would contain 7·834 per cent. of water, which is the relation of 8½ to 108½.

The first known adoption of any standard of regain was by the Chamber of Commerce at Lyons in France, when a standard regain of silk of 11 per cent. was declared in 1840, and sanctioned by the French Government in 1841.

The first officially adopted list of regains for the various yarns was fixed that at an International Congress for the establishment of a uniform system of numbering yarn held at Turin in Italy in 1875, when it was recommended that the following list be adopted :—

" 18¼ per cent. for worsted,
17 „ „ carded woollen yarn,
8½ „ „ cotton,
12 „ „ flax and hemp,
13¾ „ „ jute,
13 „ „ shoddy yarn,

the drying temperature to be from 105 to 110 degrees Centigrade."

The regains standards of the Bradford, England, conditioning house are as follows :—

" 19 per cent. for tops combed with oil.
18¼ „ „ tops combed without oil.
14 „ „ noils.
18¼ „ „ worsted yarns.
8½ „ „ cotton.
11 „ „ silk.
16 „ „ scoured wools. "

These standards are accepted by most, if not all, of the European conditioning houses, with slight variations.

The regain of 8½ per cent. for cotton and cotton yarns recommended by the International Conference in 1875 is adopted by the New York conditioning houses, by the Bradford and Manchester conditioning houses in England, and German laws governing conditioning houses.

The drying temperature named is equivalent to from 221 to 230 degrees Fahrenheit, but at the testing house in Manchester, England, where cotton goods are the ones chiefly tested, a drying temperature of 212 degrees, equivalent to the boiling point of water is adopted.

When a sample of cotton or yarn is submitted to be tested, it is subjected to drying at a temperature of 212 degrees in a dry oven so constructed as to permit of a constant and uniform temperature being maintained. It should be so arranged that the moist vapor may readily pass away.

The weight is taken when the sample is absolutely dry, and an allowance made of 8½ per cent. on this dry weight. If this weight is found to be less than that of the sample before the test was made, the difference is considered to be excess moisture, and in case of a trade dispute where both parties have agreed to accept the opinion of the testing house, a rebate from the invoice is made to the extent of the excess moisture.

TABLE A.

Tests Showing the effect of Drying at Different Temperatures.

Two lots of yarn were dried for about three hours at a temperature of about 160 degrees Fahrenheit. The details of the tests are as follows:—

	Sample No. 1.				Sample No. 2.			
Time.	Lbs.	Oz.	Drs.	Temp.	Lbs.	Oz.	Drs.	Temp.
1-30 p. m. (before drying)	2	7	5½		2	7	14	
2-7 „ (during drying)	2	4	7½	154	2	4	13	162
Moisture lost at 154 degrees in 37 minutes, 7·3 per cent.					Moisture lost at 162 degrees in 37 minutes, 7·68 per cent.			
2-17 p. m. (during drying)	2	4	4	155	2	4	11	162
2-32 „ „	2	3	14½	156	2	4	8½	158
3-5 „ „	2	3	10	158	2	4	6	158
3-19 „ „	2	3	9	160	2	4	5½	158
3-28 „ „	2	3	9	160	2	4	5½	159
3-50 „ „	2	3	8¼	159	2	4	5¼	160
4-30 „ „	2	3	8¼	158	2	4	4¾	160
Moisture lost at 160 degrees.	9·57 per cent.				8·97 per cent.			
4-37 p.m. (during drying)	2	3	7¼	180	2	4	4	189
4-48 „ „	2	3	5¼	206	2	4	2½	208
4-52 „ „	2	3	5	214	2	4	1	213
5-10 „ „	2	3	5	214	2	4	1	214
Moisture lost at 212 degrees.	10·25 per cent.				per cent.			
5-30 p.m.					2	4	0¾	230
Moisture lost at 230 degrees,					9·60 per cent.			

(The temperature was raised to 230 at 5-12 p.m.)

Some interesting figures are given in Table A, which shows the results of tests made at the Manchester Testing House on two different samples of cotton yarn, extending over a period of four hours, the first three hours being at a temperature of 160 degrees, the next 40 minutes at a temperature of 212 degrees, and 20 minutes more at a temperature of 230 degrees.

The results show that during the first 37 minutes, the samples lost 7·3 per cent. and 7·68 per cent. of moisture, respectively; at the end of three hours had lost 9·57 and 8·97 per cent.; and that an additional hour of drying at a temperature up to 230 degrees only caused the samples to lose a little over one-half of one per cent. additional. The manager of this testing house states as his conclusions that a temperature of 212 degrees Fahrenheit at least should be adopted in testing for moisture, and that at this temperature 40 minutes is sufficient to dry the sample so that it ceases to lose weight; also that in case a temperature of 160 degrees only is available, two hours time is required. He recommends that samples to be tested should be from one to three pounds in weight; not less than one pound.

While cotton does not possess hygroscopic properties to so great an extent as some other fibrous substances, its regain standard only being 8½ per cent., as compared with 11 per cent. and

from 14 per cent. to 19 per cent. for various woollen yarns, still it is sufficiently susceptible to atmospheric conditions to vary according to the humidity in the atmosphere, the temperature of the air, the barometric pressure, and also, of course, according to the length of time and the conditions under which exposed. For example, a bale of cotton, especially of newly picked cotton early in the season, would be at its greatest weight when baled. This weight would be reduced on reaching an eastern mill, and would be still further reduced as the cotton passed through the various processes and was subjected to the currents of air in the pickers and the gradually increasing temperatures of the mill. By the time it became yarn, it would have suffered the greatest loss of moisture, and would be in the condition to begin to regain in weight when subjected to ordinary atmospheric conditions.

Raw cotton that has been opened and exposed to the temperature of an ordinary spinning room, or yarn taken direct from the spinning room and placed in a shed sheltered from the sun, to which the outer air has free access, will gain from 1½ per cent. to 3½ per cent. in 24 hours, according to the condition and temperature of the atmosphere; but the same yarn taken directly from the spinning room and exposed to a test in a properly constructed oven at 212 degrees Fahrenheit for an hour will lose from 5 per cent. to 6 per cent. more; in other words, the heat of the mill drives out only about one-third of the natural moisture present in cotton when it is in an air dry condition, and the moisture expelled returns when the cotton is so exposed to the atmosphere that it may make its natural regain.

Tests made of cotton as taken from the bale show that cotton generally contains more moisture than is allowed by the standard of 8½ per cent. regain over absolute dryness. Table B showing tests made by Mr. HOWLAND some years ago indicates that the average percentage of moisture in all American and Egyptian cotton is in excess of 6·83 per cent., the standard. The tests of Indian cotton indicate that they contain rather less moisture than the standard. The table shows also that the minimum moisture contained was 6·2 per cent., in the case of Indian cotton, and the maximum 16·2 per cent., in the case of American cotton.

TABLE B.

VARIETY OF COTTON.	PERCENTAGE OF MOISTURE.		
	Maximum.	Minimum.	Average.
NORTH AMERICAN.			
Texas	14·8	6·9	9·2
Orleans	9·9	7·8	9·7
Memphis	9·8	7·1	9·4
Sea Island	9·9	7·4	9·6
Savannah	16·2	10·7	13·8
Norfolk	10·3	8·4	9·4
Florida	8·9	7·2	8·7
SOUTH AMERICAN.			
Maceio	8·1	.....	8·1
Pariaba	8·3	.....	8·3
Brazil	11·8	7·3	9·5
Peru	9·8	7·5	9·1
EGYPTIAN.			
Ashmouni	9·5	6·8	8 4
Gallini	10·8	7·1	9·3
Brown	8·7	7·8	8·3
INDIAN.			
Surat	7·7	6·2	7·5
Dhollera	8·1	6·4	7·
Bengal	8·2	.....	8·2
Tinnevelly	7·9	.....	7·9

Similar tests made by Mr. C. T. BRADBURY show that as a result of testing samples from about 10,000 bales received at his mills, very few bales contained less than 8 per cent., the minimum being about 7·7 per cent. The majority of the tests showed from 8 to 9½ per cent. of moisture, and in extreme cases 13 per cent. Another series of tests I have seen show that out of fourteen tests, six only contain less moisture than allowed by the standard regain, and this only fractionally less, whereas eight tests showed from ·2 to 2·4 per cent. excessive moisture.

The amount of moisture in raw cotton depends largely upon the treatment of cotton after picking and before balling, upon the age of the cotton, and where it has been stored. The largest amount of natural moisture in cotton is found immediately after it has been picked from the cotton plant especially in the case of cotton picked early in the season. In some districts, especially in the Sea Islands, it is customary to spread the newly picked cotton in the sun, to ripen and dry it, before ginning, but in the main cotton belt no such care is taken, the result being that the cotton is ginned while moist, tending to gin damage; but the planter ignores this in his anxiety to have it baled with as little loss of weight as possible.

Colonel KING, Secretary of the New York Cotton Exchange, informs me that he has known shipments of early picked cotton to lose from 22 to 27 pounds per bale in transportation from Galveston to New York. This excess of moisture in cotton over and above the accepted standard is accountable for the invisible loss noticed in cotton manufacturing when an accurate account is kept of the weight of bagging and ties, of waste sold, of yarn produced and weighed after recovering its natural moisture, the total of these weights being always less than the weight of cotton used. Mr. SOUTHWORTH in a paper read some years ago* on round-lap bales reported on tests in which round and square bales were opened, the cotton placed loosely in bags, and allowed to stand in the opening room for ten days ; cotton from the round bales lost 12·4 per cent. and from the square bales 2·4 per cent.

In my endeavours to ascertain the standards of moisture in cotton adopted by the Cotton Exchanges, I have communicated with the Secretaries of the Cotton Exchanges in New York, New Orleans; Liverpool, England ; Havre, France ; Bremen, Germany ; Alexandria, Egypt ; and Bombay, India.

At none of those from which I have received replies do I find that the conditioning houses' standard or any other has been adopted. In New York there are two regulations regarding moisture. One refers to cotton damped by water used in extinguishing fire, which is a form of dampness outside of the scope of this paper ; the other rule was formed to prevent the storage of cotton below the level of the street where it might absorb moisture. Such cotton is not deliverable until after it has been stored for thirty days above the street level to allow the dampness to dry out. The rule of the New York Cotton Exchange dealing with this matter is as follows :—

> " Cotton which may have been stored below the level of the street shall not be a good delivery until after the same shall have been restored above the level thereof for a period of at least thirty days. "

Beyond this the matter of moisture is generally regulated by custom, *i.e.*, the receiver of the cotton at the time of its receipt generally demanding and receiving an allowance in weight to overcome the moisture. It is the duty of the receiver of the cotton, or the broker acting for him, to see that the cotton is in proper condition, or otherwise suffer the loss in weight.

There are no specific regulations in force at the New Orleans Exchange in relation to maximum allowance for moisture in raw cotton. It is the custom of the weighers for the sellers and buyers to meet at the scale and there agree upon the proper allowance, which varies in accordance with the condition of the bales. Where they cannot agree, the cotton is not weighed and delivery is not accepted until the bales are put in proper order.

* Transactions, New England Cotton Manufacturers' Association, Vol. 71, p. 220.

The custom of the Liverpool Cotton Association is to settle by arbitration disputes as to whether cotton is damp, and if so the allowance to be made for same. The rule there is that if the arbitrators award anything under ten pounds per bale of 480 pounds, the buyer must take the cotton with the allowance awarded; if the award is ten pounds or over per bale, the buyer has the option of returning the cotton at the market price of the day. There is a right of appeal from the arbitrators' award to the "Appeal Committee on Damp" of the Association.

The following is the Liverpool by-law on the subject:—

> "If in the opinion of two qualified persons cotton turns out at time of delivery to be damp or wet, and if such arbitrators consider an allowance of at least ten pounds per bale of 480 pounds average weight, if American cotton, to be due thereon (and this shall be the ratio in cases of damp occurring in growths other than American) the buyer shall have the option of closing the contract at the market price of the day, subject to the right of appeal by the seller."

At Havre, the Syndicat du Commerce des Cottons has no specific regulation as to moisture in cotton. General disputes, however, are referred to arbitration.

As to standards adopted by Commercial Associations dealing with cotton yarns, the only one that I have been able to find is one of the yarn contract rules that were at one time proposed for adoption in Manchester, England, but which I believe are not in force, reading as follows:—

> "In case of dispute as to counts, length, weight, or condition, the yarn shall be tested by and according to the rules of the Manchester Testing House, and its certificate shall be binding on both parties, who, however, shall have the right to be represented when the samples to be tested are drawn."

As a rule, the most severe tests of textiles are made by war departments before accepting delivery of supplies for military clothing and other army purposes. The correspondence, however, with the United States War Department and the British War Office elicits the reports that no account is taken as to the moisture contained in materials from vegetable fibres so long as they are sensibly free from excess moisture, and the scrutiny of regulations adopted by the French and German War Departments does not show the adoption of any standard of moisture.

The space customarily occupied by papers read before this Association is now exceeded or the subject of moisture might be dealt with from other standpoints, for instance, the value of the presence of moisture during the manipulation of the fibre in the process of manfacturing, which is undoubtedly of great importance, but this would introduce the subject of Humidity which has already been repeatedly dealt with before the Association.

The apparatus for testing samples of cotton and yarn is also an interesting subject, but owing to the many varieties of apparatus used it is impossible to do justice to them in a brief paper; I will merely state that the drying ovens adopted should be such as to allow the temperature to be easily raised to and maintained at as high as 230 degrees Fahrenheit. Not only should it be possible to maintain this temperature for a considerable period, but it should be maintained the same in all parts of the oven, so that all portions of the samples may be subjected to the same temperature, without the risk of charring certain portions before other portions are thoroughly dry. The best construction is of that type which permits the sample to be held in a scale-pan within the apparatus connected to a scale beam on the outside, so that the weight may be ascertained without removing the sample from the oven. Where the sample has to be removed, a liability of error occurs from two causes, one being the tendency for the current of air produced by the heated cotton while being weighed to raise the end of the scale on which it is placed, the other being the fact that absolutely dry cotton tends to absorb moisture very readily from the atmosphere, having been known to gain three per cent. in three minutes, so that any delay in weighing produces an error.

The subject of artificially moistening cops, skeins, warps, and other forms of yarn would furnish a subject for a paper in itself. If such a paper dealt with the European methods of rapidly restoring to dry yarn its natural moisture, and sometimes considerably more, by means of damping machines, water sprays, steam ovens, and moistening warper rolls, it would possibly be a source of information to Superintendents of American Yarn Mills where artificial moistening is not practised to any extent.

In conclusion, I would say that, theoretically a standard of moisture in cotton or cotton yarn should be one that will allow the material to contain and retain such an amount of moisture when the temperature, the barometer, and atmospheric conditions are normal, that cotton when in that condition will not increase or decrease in weight appreciably when exposed to the air. In order to determine such a standard it would be necessary that the humidity of the atmosphere and the temperature should also be specified.

As these conditions are constantly changing, and as different countries and different latitudes possess different atmospheric conditions, a standard of 8½ per cent. regain has been widely accepted as an average condition. In my opinion this is a fair standard, allowing for almost 8 per cent. of moisture in cotton, which is as much as ought to exist under normal conditions.

An appreciably lower standard would not allow for cotton retaining the whole of its natural moisture, while an appreciably higher standard would be such that cotton so saturated would be liable to mildew. These remarks apply to cotton in its natural state or when spun into yarn in its natural state. For cotton that has been bleached or otherwise treated a different standard ought to be adopted.

I do not feel that the subject of the standard of moisture in yarns is of much importance to the American cotton manufacturer, since yarns are mainly sold in an air dry condition, but I do feel that the subject of maintaining a standard of moisture in raw cotton that should not appreciably be exceeded is worth the attention of the Association. Not only would it result in manufacturers obtaining raw cotton more free from moisture, but in time it would result in encouraging or compelling the planters to give more attention to the drying and ripening of cotton before ginning, with a result that there would be less gin damaged stock.

I desire to acknowledge the co-operation of Mr. J. H. LESTER, Manager of the Manchester, England, Testing House; Mr. WALTER TOWNSEND, Manager of the Bradford, England Conditioning House; Dr. KOINGS, Director of the Crefeld Trocknungs Anstalt; Colonel W. V. KING, Superintendent of the New York Cotton Exchange; Mr. H. G. HESTER, Secretary of the New Orleans Cotton Exchange; Mr. H. LLOYD JONES, Assistant Secretary of the Liverpool Cotton Exchange; MONS. H. LECOMTE of Paris, France; Mr. C. T. BRADBURY of Manchester, England; the heads of military supplies department of the United States, Great Britain, France, Germany, and many others who have supplied me with information or results of tests to incorporate in this paper.

My treatment of this subject is intended to be suggestive rather than exhaustive, and in this communication I do not feel that I have done more than endeavor to attract the attention of members of the Association to this important subject with the hope that it may lead to further experiments being made in various mills, the results of which may ultimately be communicated to the Association.

Proceedings of the Annual General Meeting.

The annual general meeting of the Members of the Bombay Millowners' Association was held on Wednesday, 19th April, 1905, MR. SASSOON J. DAVID presiding. Among those present were: The Hon. Mr. Vithuldas D. Thackersey (Western India S. & M. Co., Ld., Hindustan S. & W. Mill Co., Ld., and Indian Manufacturing Co., Ld.); Mr. Dwarkadas Dharamsey (Tricumdas Mills, Ld., and Lakhmidas Khimji S. & W. Co., Ld.); Mr. Purshotum Jevandas (Bombay Cotton Mill); Mr. H. E. E. Procter and Mr. H. Gawthorn (Kohinoor Mills, Ld.); Mr. N. B. Saklatwala (Swadeshi Mills, Ld.); Mr. Morarji Norotum Gordhandas and Mr. J. K. Parulker (Jewraj Balloo S. and W. Co., Ld.); Mr. Ahmedbhai Hubibbhoy (Nicol Mills); Mr. S. A. Nathan (E. D. Sassoon Mill); Mr. Goolam Hoosein Allana (Indo-China Manufacturing Co., Ld.); Mr. Cawasji Jehangir Cawasji and Mr. H. R. Umrigar (Jubilee Manufacturing Co., Ld.); Mr. Jehangir B. Petit and Mr. D. B. Petit (Emperor Edward Mills Purbhani Ginning and Pressing Co., Ld., Oomri Ginning & Pressing Co., Ld., and Godavery Valley Ginning and Pressing Co., Ld.); Mr. D. E. Wacha (Morarji Goculdass S. and W. Co., Ld., and Sholapur S. and W. Co., Ld.); Mr. Jamshedjee A. Wadia, Mr. Fazulbhoy C. Ebrahim and Mr. C. J. A. Wadia (Currimbhoy Ebrahim Mill and Crescent Mill); Mr. Narandas Purshotamdas and Mr. Pranjeevandas Narandas (Saraswatee Mills, Ld.); Mr. H. R. Greaves (Imperial, Empress, New Empress, James Greaves, Connaught, Leopold, Apollo and Howard and Bullough Mills Cos., Ld.); Mr. Manmohandas Ramjee (Indian Manufacturing Co., Ld.); Mr. James Nissim; and Mr. C. J. Michael, Acting Secretary of the Association.

CHAIRMAN'S SPEECH.

CONDOLENCES.

The Chairman said: Gentlemen,—As is customary on these occasions, I beg to propose that the report of the Committee of the Bombay Millowners' Association for the year 1904, together with the Statement of Accounts appended thereto, be approved and adopted. In moving the adoption of our Annual Reports, it has been the Chairman's practice to review the report laid before the meeting, and to make a few observations on questions affecting the interest of the industry we represent. I do not intend to depart from this time-honoured custom on the present occasion, and will therefore say a few words on questions dealt with by your Committee, and which, I trust, would prove of general interest. Before I do so, however, I will take this opportunity to refer to the sad duty your Committee had to perform, during the course of last year, in recording their deep regret at the death of three of the leading members of the mercantile community of Bombay who were all of them intimately connected with the cotton industry of this city. Two of these belonged to the well-known house of Messrs. Greaves, Cotton & Co., *viz.*, Sir George Cotton and Mr. John R. Greaves, and the third was that great Indian whose name is now a household word throughout India, the late Mr. J. N. Tata. It is our sad duty, also, on this occasion, to have to record with deep regret the recent death of another gentleman who took a keen interest in textile affairs, namely, Mr. H. S. Batliwalla, of the Jamshed Mills, who are members of the Association. I take this opportunity to endorse, on behalf of the Association, our Committee's messages of condolence to the firms and families of the deceased gentlemen. And now, gentlemen, I shall refer to the report before us as briefly as I can.

AN IMPROVED SITUATION.

In the first place, then, I must confess that I feel a certain amount of gratification in being able, at the end of my first year's Chairmanship, to take a retrospect of a year which, though it opened with a cheerless outlook that lasted till almost the end of the year, had latterly paved the way to an era of a long-awaited prosperity, and which towards its end held out good promise for the continuance of the improved situation and encouraged the hope that after the manifold vicissitudes and the many critical periods that we had passed through, we had at last entered upon what seemed to be a period of genuine prosperity. This promise, as the past few months have shown, has been fulfilled, so far as we can see. If we look back at the annals of

this Association, if we, in fact, look back at the history of our industry ever since its inception in this country, we shall not be able to point to a single year with such a good record as the present year promises to show, as it is expected to turn out, a year of unprecedented prosperity, not only for the textile industry of this country, but for the sister industry of Lancashire and for our Japanese rivals as well. It is very gratifying for us to note in this connection that the year which opens with such bright prospects for us should be a most auspicious year in another sense also, for it is the year in which it is our good fortune to welcome Their Royal Highnesses the Prince and Princess of Wales to our shores. It is highly satisfactory that owing to this fortunate coincidence it is now possible for Bombay city, which naturally participates in our prosperity, to express its loyalty to the Royal visitors in a manner worthy of the city and the visitors we are to welcome. It is to be sincerely hoped, therefore, that the members of our Association would co-operate in a most liberal and enthusiastic manner in supporting the Museum Scheme which is contemplated by the citizens of Bombay for commemorating the Royal visit, especially as any movement that has the advancement of technical and scientific studies for its object is sure to benefit our industry and the city of Bombay as well. Reverting to the prospects of our industry it may be noted that many causes have contributed towards bringing about this unexpected turn of the tide, chief among which has been the unusually brisk demand for yarn in China. This demand was the natural outcome of a partial depletion of stocks, due to reduced exports to China caused by the short-time movement; that was the order of the day during several months of last year throughout the textile world. Our own exports alone showed a reduction of 144,000 bales as compared with the figures for 1903. Moreover, the demand that set in was increased owing to the enhanced spending capacity of the Chinese agriculturists and labourers as the result of the present war, and owing to the steady rise in silver. Secondly, we owe much to the recent years of prosperity this country has experienced, which has increased the local demand for our production. Thirdly, to adduce one more reason, we have had in our favour the recent great decline in the price of cotton, which brought down the market to about its normal level. Consequent upon these favourable circumstances our industry is passing through a period of recuperation and of profit-making, and we must congratulate ourselves for the fact that all the mills in Bombay are working full time now, and that there is not a single spindle idle at present. The outlook for 1905 is therefore cheerful, and from the profit-earning point of view it may be depended upon to turn out a more sucessful year than any that we have hitherto experienced. It is to be hoped that these remarks will convey a feeling of satisfaction to the minds of weary shareholders who have given up all dreams of satisfactory dividends, for we all wish them prosperity, as their prosperity essentially means our own real, genuine prosperity. The reason why a prosperous balance-sheet period for the end of this year might be safely reckoned upon lies in the fact that nearly all our mills have been able to dispose of their production ahead, almost up to the end of the year, at a good margin of profit. The year 1904 was a bad dividend paying one, as the situation began improving only during the last few months. Prior to that, owing to American speculation, cotton prices were prohibitively high for some months, and it was only in the case of a few fortunate mills who had bought cotton in advance that fair results could be shown. The situation is different now, as at the present price of cotton it pays well to keep the mills busy full time. But having said this I feel that my review of the situation and the bright picture I have drawn of the future would not serve the intended purpose were I not to supplement our note of congratulation with a few words that stand uppermost in my mind in this connection, namely, that it behoves us now, not to be carried away by the passing wave of prosperity, but to look to the future, to take full advantage of the situation, to review our position and consolidate our interests.

Questions for the Future.

The large profits now earned, like everything else connected with human affairs, cannot be counted upon as a permanency. The disconcerting fluctuations in cotton and in silver prices that we have witnessed of late years must be reckoned with as recurring factors, and we must also bear in mind that our trade with China is threatened with abnormally keen competition

not only from Japan, but, in the not distant future, from China herself. I think, therefore, as I just said, it is now the proper time for those who have the true interest of the industry at heart not to be carried away by the good results of one or two fortunate years, but to look instead to the husbanding and safeguarding of our resources, against bad times, and to meeting to a greater extent the local demand for production. It is also now the proper time for us to make some provision for Provident Funds by setting aside a portion of our profits to form the nucleus of such a fund for granting bonuses to deserving workmen, and for compensation in case of accidents, etc. I referred to this subject at our annual meeting the year before last, but no favourable opportunity presented itself for our doing anything in the matter till this year, and I sincerely commend the idea to the consideration of all mill-owners, in the interest of our industry and also for the sake of our operatives. Speaking of our operatives, we all know how necessary it is for us to have a steady supply of skilled labour, and now that the time is favourable for the purpose, it behoves us to take some steps, as soon as possible, in order to cope with the dislocation caused by the plague in our labour market at regular intervals. Plague is the worst difficulty that we have to contend with in connection with our operatives. It must be remembered that when we lose a trained hand through plague, and we have already lost in this manner a large percentage of such trained hands, we cannot replace him except by the employment of unskilled labour. I would therefore take this opportunity to commend to your most earnest consideration the advisability of our persuading our workmen, by all the means in our power, to get inoculated. We might popularize inoculation by offering the mill-hands substantial inducements. But in matters of this kind concerted action is necessary as no solitary mill can carry out the idea without running the risk of facing a strike among the mill hands. If, therefore, this meeting approves of the idea, I shall take an opportunity as early as possible to suggest to your new Committee the formation of a Special Committee for the purpose of going into this matter with a view to taking practical action in this connection. It would be very advisable in the meantime for us to actively co-operate with our Municipal Commissioner in the steps intended to be taken in this connection at a special meeting to be held at the Municipal Hall on Tuesday next.

Turning to the statistical figures in our report, I find that they are all well explained by the remarks that accompany them, and I shall therefore not allude to them here. There is one interesting feature, however, to which I may draw attention, and that is the increase in the number of looms during 1904. The returns made by the mills as at 30th June 1904 show that Bombay Island has added 1,011 looms to her complement while the rest of India has added only 284, and in this important department Bombay now represents 53·23 per cent. of India's total. Satisfactory as these figures are, I think, however, that the returns from June last up to this month will show an additional increase of about four to five thousand looms in Bombay. In spindles, there has been practically no increase during the year, which fact, taken together with the increase in looms, indicates a further reduction in future in the manufacture of reeled yarn for export to foreign countries than that now shown in the report before us. It is encouraging to note in this connection that it seems as though we are now entering upon a period which marks the commencement of an increasing demand for local yarn and cloth in the country itself, a demand strengthened by successive seasons of favourable rainfall and the consequent activity in trade all round. As regards exports of cloth to China it is interesting to note that the year 1904 shows an increase of nearly 17 times on the figures for 1903, which is very satisfactory. Coming to our position as regards cotton we approach a subject that has been engrossing much attention of late. The increased and improved cultivation of cotton is contemplated everywhere, and our thanks are due to the Government of India for the steps they are now taking for the improvement of cotton cultivation with special reference to the selection and distribution of seed suitable for sowing.

Improving Facilities.

The other questions dealt with in the report are most of them of general interest. It is thought by the members of your Committee that the annual grant to the Victoria Jubilee Technical Institute should be continued, and in view of the recent discussion in the Local

Press, and at the Corporation Hall, as to the qualifications of the students passed by the Institute, it is to be hoped that measures would be taken to increase the practical efficiency of the students and qualify them more thoroughly to fill up the positions open to them in our Mills and Factories. While on this subject, it is highly satisfactory to note that under the State Scholarships, recently founded by the Government of India, with a view to the holders proceeding to Europe to pursue a special course of studies in connection with the textile industry, the Bombay Government have already selected two candidates from Bombay town to undergo the necessary studies as the holders of the new scholarship.

With reference to the remarks I made, in connection with the putting up of chawls for mill-hands by the Improvement Trust, on certain conditions, this matter, which has already been under consideration for such a long time, now rests simply on the embodiment in the Act, by the Legislative Council, of the proposed amendments to the Improvement Trust Act. As soon as this is accomplished, it is to be hoped that a number of millowners will be in a position to take advantage of the facilities afforded them, and erect chawls for their workmen under conditions that would be beneficial to the city at large and to the mill-hands. Speaking about the Improvement Trust I will take this opportunity to thank you, gentlemen, for again re-electing me as your representative on the Board of Trustees, and I hope that I shall continue to look after the interests of our Association in the future to the best of my ability, as I have done in the past. It is some consolation to note that our efforts at obtaining a reduction in the water rate for industrial purposes have met with a certain measure of success, as the rate has been reduced from this Municipal year by 2 as. per 1,000 gallons. I suppose we must be content with small mercies for the present. Let us hope, however, that our claim for more favourable consideration will not be lost sight of, and that we shall obtain a further substantial reduction in the near future. With reference to the Chambers of Commerce Conference, held in Calcutta in the first week of January last, it is to be regretted that in spite of the representations made by your Committee and the somewhat lengthy correspondence they had on the subject with the Bengal Chamber of Commerce, they could not, for reasons shown in the correspondence, obtain effective representation for our Association, at the Conference, but it is to be sincerely hoped that as the result of your Committee's efforts our Association would be represented at future Conferences.

Fiscal and Other Questions.

I do not intend referring on this occasion to the question of the Excise Duty on lines already traversed, as that would serve no useful purpose. The Government are aware that nothing would be more gratifying to us than the abolition of the impost, but we would rather not have that if it would mean the abolition of the import duty on foreign cloth as well. The manner in which the impost was made has engendered a feeling of insecurity in the minds of enterprising Indian capitalists. It is easy to understand that if local enterprises are to be penalized at the bidding of the powerful electors of Great Britain, the idea will take root in the minds of local capitalists that no industrial enterprise, started with local capital, will be able to secure unfettered development as soon as they come to clash with the powerful interests of rival enterprises in Great Britain. From this point of view, if from no other, the Excise Duty is peculiarly undesirable. It has been said in this connection that one of the effects of the duty has been to give an advantage to the hand loom over the power loom weavers. Mr. Johnson, of the Upper India Chamber of Commerce, has recently taken a great deal of trouble to make this point clear, and has shown that this is a factor that we have to reckon with. It seems to me, however, that in spite of the exemption from Excise Duty which hand looms enjoy, the power loom will continue to hold its own in the future, as I am firmly convinced that there is ample room in India for the expansion of both the hand and the power loom. As regards our exchange relations with China, I may be allowed to say a few words on this occasion. Article II of the treaty between Great Britain and China, which has recently come into force, stipulates that the latter Power agrees to take the necessary steps to provide a uniform national coinage, and pledges China to a currency reform. The American Commission on International

Exchange which recently visited Europe and the Far East, the Shanghai Chamber of Commerce, Sir Robert Hart, the Inspector-General of the Imperial Chinese Customs and the China Press, all strongly advocate the adoption of a uniform currency in China, in anticipation of the introduction of a gold standard at a suitable time. The latest advices from China indicate that the Chinese Board of Revenue have begun, since 1903, to collect and store up gold bars with the object of starting a gold standard. It is estimated that at the present rate of collection it will take at least 6 or 7 years more before the Chinese can have a gold standard. This confirms the view taken by Sir Earnest Satow, the British Minister of Peking, who informed us at the meeting we held in these rooms in his honour in 1903, while he was passing through Bombay on his way to China, that he did not think the change in China, from the silver to the gold standard, would come about at least for some years longer. Till then, our exchange relations with China, will, I think, make the trade with the country nothing but a gamble. I referred last year to the advisability of the Government of India purchasing silver in such a manner as not to give rise to sudden and excessive fluctuations in the price of silver. I am glad to note in this connection that, as the result of the report of the American Commission on International Exchange recommending the buying of silver for coinage by various Governments at regular periods, to maintain stability, the Government of India has been recently making its purchases with regularity, and the consequence is that the fluctuations in London was limited to 2*d* in 1904, while in 1903 it was 6*d*.

Government's Support.

Of the other items in the report with which we are concerned there is one on which, I think, I may as well say a few words. We note from the figures given in the report that the average monthly shipment of yarn to the Levant now exceeds considerably the entire year's shipment of 1901-02. This result should be extremely gratifying if we can be sure of the continuance of such large shipments in future. I am afraid that the dearness of American Cotton during 1904 has been chiefly responsible for the exceptional demand in the Levant for the comparatively cheap Indian yarn during that year. In spite of this, however, if the Bombay mills devote some attention to the needs of the Levant Market, and supply it with the right kind of goods, there is no reason why we should not secure a considerable share of the Levant Trade. We have reason, so far, however, to note with gratification the result of the systematic efforts inaugurated by our ex-Secretary for capturing the Levant Markets. There are several other items in the report which call for comment, but I think, gentlemen, I have already taken enough of your time, and I will now, therefore, conclude by making reference to our indebtedness to the Government of India for the great interest it has evinced, during recent years, in all matters affecting the commerce and industry of this country. I believe, I echo the sentiments of all present when I say that at no period of the history of the Government of India such care and attention have been paid to the true economic interests of India as under the administration of Lord Curzon. It is encouraging to note with what zeal and thoroughness measures calculated to benefit trade and industry have been considered and in many cases put into practice of late by the Government of India. The scholarships for Textile Studies I have spoken of, the Commercial Mission to Persia, the Agricultural Conference held in September last in Poona, the Extension of Railways and the Irrigation Schemes, the Systematic Encouragement of Technical Education, the steps that are being taken for the Improvement of Cotton Cultivation, are all matters in which we are concerned in one way or another, and which testify to the genuine and sympathetic interest the Government are taking in the cause of trade and industry. But the most practical evidence the Government of India have given as regards its attitude towards the economic interests of India is the establishment of the new Department of Commerce and Industry, to work which two of Bombay's ablest men have been taken away, namely, Mr. W. L. Harvey, who had earned the respect and esteem of all as one of our ablest Municipal Commissioners, and who was instrumental in getting the Corporation to recognise the justice of our contention in favour of reduced water-rates for trade purposes, and the other Mr. F. Noel-Paton, the ex-Secretary of our Association, to whose

services highly complimentary references were made by the members of this Association on the occasion of a presentation that was made to him on the eve of his departure for Calcutta. We must feel specially gratified at the selection of Mr. Noel-Paton to the Director-Generalship of Commercial Intelligence in India, as we may now confidently expect that all the varied and complex questions relating to the industrial interests of this country will be dealt with by the new department with the aid of an officer whose grasp of the technical and other details relating to our commerce and industry pre-eminently qualifies him for the new position he now occupies. Before taking my seat, gentlemen, I should like to take this opportunity to express, on behalf of the Association, our best thanks to my colleagues on your Committee for the valuable services they have rendered to the Association, and to Mr. C. J. Michael, our Acting Secretary, for the very satisfactory manner in which he performed his duties during the absence of Mr. Paton on a long holiday last year, and the capable manner in which he compiled the greater part of the report before us while carrying on his duties singlehanded since the departure of our ex-Secretary for Calcutta.

With these remarks, gentlemen, I beg to move the adoption of the report before us.

The Hon'ble Mr. Vithuldas D. Thackersey :—

Gentlemen, our Chairman has given, in his very lucid speech a resumé of work done by your Committee in the past year, and also given his opinion on the present position of the Cotton Industry. He has rightly pointed out that we have entered upon a year of unprecedented prosperity. May it long continue. It must, however, be remembered that this one fat year follows upon a number of disastrously lean ones which it will take many fat years to make up for. As our Chairman has touched upon the causes of the present year's prosperity, I will pass on to other matters.

Firstly, with a regard to a subject which lies at the very core of our Industry, I mean the cultivation of long stapled cotton in India. We have observed with satisfaction that the Local Government as well as the Supreme Government have, of late years, recognized its importance and are devoting considerable attention to it. To the experimental farms previously existing in this Presidency additions have been made in Dharwa and Khandeish, the two most important cotton districts, and we are most hopeful that the experiments in these places will prove of the highest advantage, as they are carried on under suitable conditions of soil and climate. Previous experiments with American and Egyptian seeds did not prove successful; and for some time past greater attention has been devoted to the selection of the best Indian varieties and the improvement of them by cross-fertilization. This must eventually prove of immense value to the cotton-growing districts, but the greatest success which the Agricultural Department under the guidance of its able and enthusiastic Director, Mr. Lawrence, has achieved, is in Sind, where it has been proved beyond question that Egyptian cotton can be successfully raised as an irrigation crop. Those who took the trouble to minutely examine the samples of this Sind-grown cotton at the recent Bombay Exhibition cannot but have been struck with the length and silkiness of its fibre. Those who are best able to judge informed me that within five years a hundred thousand bales would be available, and within ten years three hundred thousand bales. Now, gentlemen, we all know what that means. It will revolutionize the whole cotton industry. It would enable us to manufacture finer yarn and cloth, for which there is an enormous demand in India. It may be said that Europe would out-bid us for this cotton, but who would doubt the capability of a country growing its own cotton and having a home-consuming market to hold its own against outside competition. For this progress we are greatly indebted to Government but specially to the Honourable the Revenue Member of Council, Sir James Monteath, who throughout his term of office has persistently and with unabated zeal prosecuted his plans for the improvement of cotton, and has thus conferred a great boon not only to the cotton industry but also to agriculturists in general.

The Technical Institute.

Gentlemen, I may venture to say only a word about the Victoria Jubilee Technical Institute. I hold no extreme views either as to its utter failure or its unbounded success. I am not one of those who in and out of season run down the Institute, declaring it to be a huge failure, incapable of producing properly trained practical men, nor on the other hand am I one of those who consider the Institute a model of perfection, leaving no room for improvement. I believe that the Institution has done a fair amount of good work, and if it has not produced many men of the high standard, such an institution with so great an expenditure might be expected to produce, it has yet supplied a large number of men for up-country mills and small factories. Reference has been made by the Chairman to the lengthy discussion which took place in the Corporation of this City. I preferred to take no part in the discussion as I believed that owing to its very composition it was quite incapable to pronounce a correct judgment on the work of a purely Technical Institute. But, gentlemen, as it concerns us as employers of labour, it is our duty to give our opinion and assistance which it deserves. It is one of the charges against the Institute that it turns out young men more versed in theory than skilled in practice. It appears to us that there is a degree of truth in the statement, and I would venture to suggest a remedy. The curriculum of the students should include both theory and practice. By practice I do not mean a little handling of tools in a small workshop attached to the Institute, but thorough practice in a well-equipped large factory, such as they may eventually hope to be in charge of. There is some truth also in the allegation that engineers and masters of departments are unwilling to take up these students; but if large employers of labour can be got to take a keener personal interest in the students of the Institute, this difficulty may easily be overcome. It is therefore absolutely necessary that the Board of Management should have on it, along with experts having technical knowledge, at least a few experienced employers of labour who will both inform as to employers' requirements, and also give opportunities to students to obtain practice in their factories, and possible eventual employment. I may mention that I have nothing to say against the Board of Trustees who are trying their level best to do good to the Institute, nor against the Professors who are I know trying hard for the student's good. The above remarks are made simply to assist the Institute in their good work.

Short-Reeling.

Last year, gentlemen, I spoke a little strongly against the impracticable suggestions to the Government Committee with respect to short-reeling. Since then we are gratified to find that our voice, feeble though it may appear in comparison with that of the Chamber of Commerce, has gained, and that in spite of one-sided recommendations of the Committee, the Government of India have been satisfied and have intimated to us that they do not intend to take any action in the matter. There is always a tendency in some quarters, instead of gradually moving towards improvement and ultimate perfection, to gain everything at once. They forget that the British Law, of which we all are so justly proud, lays down a sound principle to the effect that half a dozen guilty persons should escape rather than one innocent be punished. But these people would have the law altered that half a dozen innocent persons might be punished rather than one culprit escape. The recommendations of our Chairman, who represented us so ably on the Committee, was, of course, according to the former maxim. After what has been said by the Government, I think it would have been wise to have the matter left untouched, but as we all know the Chamber of Commerce with that philanthropic view for which they are too well known are still agitating the question not in their sphere but before the eyes of the Supreme Government and the dignified name of the conference of the Chambers of Commerce. A conference, which other large commercial bodies, having probably greater interest in the welfare of the Indians, were precluded from joining. I think their philanthropic motives would be better proved and their energies more appropriately directed if they turn their attention to the question of cotton frauds. But circumstances alter cases. It is very easy to follow the Indian proverb which says: "Let me put my finger in your eye and you can put your

finger in my mouth," but we strongly hope the Government of India will abide by their decision to which they came after due consideration of the opinions they received from all sides. Gentlemen, before I conclude, I may be permitted to refer to some healthy signs of the times. We have the Supreme Government awakened to keen interest in the industries of India manifested by the creation of a bureau of commerce and industry, a step which supplies a long-felt want. The bureau with such able and experienced officers at its head promises to be of incalculable advantage. Then we have the establishment of the Pusa Institute. Again, a number of scholarships have been granted for higher technical studies. Further, we see in all the officers from the highest, a keen desire to earn our wants as evidenced by the several Conferences and Commissions which personally visit the districts concerned, and last, but not least, the harmonious working of the Factory Act during the last year. All the questions which are pending are being dealt with in a businesslike and sympathetic manner by all the officers concerned. As we have now a newly appointed young and able Collector, we hope the time and opportunity may be given to him to become acquainted with our requirements, and save the friction which was not infrequent in previous years. Again, we may heartily congratulate ourselves on the present pleasing prospect. We have a very full cotton crop, good demand for our yarn in China and for our cloth in India. As I have said, all these are healthy signs, and let us pray that they may continue. Gentlemen, I have great pleasure in seconding the adoption of the report moved by our Chairman.

Mr. H. E. E. Procter said : In supporting the adoption of the report for the past year, I should like to endorse every word the Chairman has said as to the advisability, not to say necessity, of taking advantage of the present prosperity to put our mills on a firmer basis in every way, so that when bad times come again we shall be better fitted to meet them than we were in the past. And in this connection I should like to say a few words about the hours of labour and the installations of electric light which are now becoming so common in Bombay. I do not know whether any of you, gentlemen, have ever worked in a mill for 12 hours a day, but if you had, I think you would admit that no man could work longer and do good work. It is asking a great deal too much especially in this climate, and yet what are many of our mill owners doing but putting in electric light and working from 6 in the morning till 8 or 9 o'clock at night. I do not here wish to refer to the practice of working a mill all night, for in doing so it is necessary to have two shifts, in which case a man cannot be asked to work for more than 12 hours, although I do not think it is good policy to work a mill all night; nor do I wish to refer to those mills who use electric light to equalise their hours of working all the year to 12 hours; but it seems to me that the system of working with electric light from 6 in the morning to 9 o'clock at night is one which cannot be too strongly condemned. Mention of this was made at our meeting last year, but at that time Millowners might have had the excuse that, owing to the small profit of working, they were obliged to increase the hours of labour in order to prevent their showing a loss, although personally I do not consider that any valid excuse for over-working our operatives. But now that all mills are doing so well no such excuse can be urged, and I hope this Association will endeavour to do what it can to, restrict the working hours to a maximum of 12. To ask our operatives to work longer is nothing more or less than slave driving, and it must have, and is having, a very serious and bad effect on the physique of those employed. Of course it may be said that the operatives work willingly and probably they do, because they do not realize the danger to health, and they see an immediate gain in the increased wages ; but this does not make it any the better, and I feel very strongly that unless Millowners themselves restrict the hours of labour, Government will step in and impose restrictions which we may find very irksome. Indeed I would go further and say that if Millowners continue to work their operatives for 15 hours a day, Government will be obliged to intervene for the protection of the operatives themselves. Now, I hope and believe that many of you gentlemen present agree with me in this matter, and as we have the remedy in our own hands, let us put a stop to the pernicious system ourselves instead of compelling Government to legislate in the matter. Mr. David has put forward the idea of a Provident Fund for our operatives, which is in itself an excellent proposal, but it seems to me rather a

mockery to hold out to them on the one hand the advantages of a provident fund while on the other hand we are undermining their health and constitution by over-working them. As regards inoculation, I think the Chairman's proposal is a very sound one, and I for one would be very glad to support it as much as possible. It appears to be useless to expect any help from Government in this matter. The Chamber addressed them as far back as September 1903, urging the necessity for encouraging inoculation as much as possible, but beyond a formal acknowledgment of the letter they never even got a reply. We have now had plague with us for over 8 years, and inoculation is the only remedy which has proved of any value. All other means have failed while the evidence in favour of inoculation is overwhelming. Personally I believe that inoculation is the only preventive, and until this is recognized and inoculation resorted to like vaccination for small-pox, we shall never combat the plague successfully. As pointed out in the *Times of India* on Monday, had the people of Bombay all been inoculated nearly a lac of lives would have been saved in the past 8 years, and it is amazing that people refuse to use the means of safety which is at their doors. Gentlemen, those of us who have influence, and every millowner has it, and who admit the value of inoculation, and no one who has weighed the evidence can deny it, should do their utmost to help it forward, and I hope when the Sub-Committee formulate the scheme referred to by the Chairman, you will all heartily co-operate to make it a success.

Mr. Dinshaw E. Wacha said : Considering, Sir, that there is again a tide in the affairs of Millowners which is leading them on to fortune, it would, I deem, be not uninstructive if I occupy a few minutes of the time of the meeting in reviewing at this juncture the twofold conditions on which invariably depend the progress and welfare of the cotton industry in India, of which our city is the greatest stronghold. As I said once before at this table, the elements which spell its weal or woe are its own domestic economy, and that external circumstance over which it has no control. Our home trade may be all that we wish for and yet owing to foreign causes, whether of disturbed politics, strained diplomacy, exchange and so forth, there might be a restriction of production or an abnormal advance in the price of the raw material or a depressed condition of the market with low prices or a combination of these with other minor disturbing influences. Or it may be the converse. The external factors may be most favourable and yet physical abnormalities of diverse descriptions or monetory stringency having the effect of diminished credit and consequent paralysis of ordinary working may be stumbling blocks in the way of smooth prosperity.

Warning to Investors.

By a concatenation of causes, the current year seems so far as it has gone, to augur well for our prosperity. The price of the raw staple has been all that is to be wished ; the price of the finished products is so far advanced as to leave a fat margin to the manufacturer, be he a spinner or weaver. Not that the sun of prosperity is shining so brightly as to justify our saying that we are reaping profits undreamt of. Unfortunately, that is the delusion which is more or less prevailing, not only in the industrial circle, but in the share market. And I think, Sir, this is the proper place and the occasion to dispel the illusion and warn investors from once more burning their fingers. That with returning prosperity there should be a moderate rise, commensurate with profits is intelligible. But when we find that the quotations of many a concern are far and above their intrinsic worth, it is evident that an unhealthy condition prevails which it is our duty to counteract. The fever of speculation in mill shares in the past has been the cause of much tribulation and distress, and I take, Sir, this opportunity to warn all *bona fide* investors to desist from entering into speculative transactions not justified by facts. Even the profits which mills are making at present are liable to undergo diminution, in the not improbable event—as experience has taught us—of a deficient monsoon.

The Production.

As far as production is concerned, it would be found, taking the official return for the nine months ending December, that Bombay had not crept up either to the totals of 1902 (31·50

crore lbs.) or that of 1903 (32·63 crore lbs.). The total registered was only 30·93 crore lbs. These statistics clearly show how far we had a leeway to make up to the one of December last. Of course, Sir, I agree with you in what you said in your opening speech, that there is not at present a single spindle idle. Let us hope this favourable condition will continue. But the meeting will, I am sure, agree with me that when we are talking of production and prosperity, we should not fail to take into consideration recent facts. Indeed there is so much loose talk of an unverified character in connection with this matter that it is but right the public ought to be well informed. That the future industrial progress will for years to come be more in the direction of weaving rather than spinning cannot be gainsaid. Speaking as an Indian it is to be devoutly wished that progress may so far be consummated to enable Millowners at the end of another decade to diminish at least 25·00 of goods imported from Lancashire. There is great scope for the production of medium shirtings, and I hopefully look forward to the day which may witness the consummation just referred to.

Skilled Labour.

But, Mr. Chairman, you have again raised your cry as to the paucity of skilled labour. I have my grave doubts with all deference to your opinion as to this cry. The Indian mill operative is what his environments have made him. The illiterate or semi-illiterate youth of to-day may become a practised and somewhat skilled operative twenty years hence. But what could you expect from him beyond this? What steps, may I ask, have the Millowners taken to improve the labour required by them? Admitting for argument's sake the fact as alleged of the scarcity of skilled labour, what action has been taken to induce such an abundance of supply as should meet our requirements. We are all apt to cry out at an evil, but what practical action and enterprise do we put forth to remedy it? I cannot help, Sir, remarking in this place that in some respects Bombay Millowners seem to lag woefully behind in discharging their obvious duty. For years together they have similarly cried about improving the staple of divers grades of cotton. But have they ever taken any concerted action in the matter? Have they ever raised their little finger to remedy the growing evil? Of what use is crying like the cartman in the fable and appealing to Hercules, when both duty and interest demand that they should put their own shoulders to the wheel? As far as the operatives are concerned, education is a first necessity. Secondly, I believe that for skilled men wages commensurate with skill are essential. But they are neither here nor there. Lastly, I repeat what I have said in this room half a dozen times that you will never be able to keep in the front rank of your industry till you have made a salutary change in the physical condition of the operative. That condition imperatively demands a working day of ten hours. I repeat I am a strong believer in shorter hours. Industrial physiology demands it; but industrial avarice is too rampant to see the good of it till one day it will kill the goose which lays the golden egg. In this connection, Sir, it is far better that Millowners should introduce reforms spontaneously which for want of that spontaniety may be enforced by the Legislature. The labour question will certainly be the future vexing problem for Millowners, and the sooner they begin to solve that problem, the better both for themselves and labour.

The Provident Fund.

Speaking generally on some of the points which the Chairman has touched, I may say, as regards the proposed Provident Fund, that if it is to be instituted on a practical basis, then the mill companies should combine to have a separate Association. It is the only way to carry out the beneficent purpose methodically and on a scientific basis. For my part I should welcome any practical suggestion. I have therefore no objection to a small Committee threshing out the question and making a report recommending some reasonable scheme. As to inoculation, whatever its prophylactic virtues may be, and there is a difference of opinion on the point. I must say that the way in which the Health Officer seems bent on booming it is foredoomed to failure. His practical sagacity, I am sorry to say, is in no way commensurate with his zeal. I am convinced from observation that any coercive or semi-coercive measure will only lead to

mischief. Neither this bizarre experiment of giving a bait. No bait however tempting will induce the illiterate, the superstitious and the exceedingly suspicious mass to voluntarily offer itself to inoculation. And I, for one, deprecate this latest boom which is attempted in this direction. It must prove as abortive as scores of other so called remedial measures to prevent the plague. Lastly, there is one more topic on domestic affairs to which I would briefly allude in reply both to the Chairman and the Deputy Chairman's observations on the Victoria Technical Institute. Letting alone the criticism, interested and disinterested which has appeared in the Press, and which was heard in the hall of the Corporation, I may say that all are agreed, even the Board of Trustees, that its sphere of utility should be expanded. But the rub is there. Institutions are cribbed by reason of their limited resources. And the Technical Institute is no exception to the general rule. Again, the present Trustees have had to deal with the legacy of some of the present members of the Board who had had the active management in their hand. It greatly hampered progress. And it is a fact that in spite of it, great progress has been achieved; but I do not at all agree with the Deputy Chairman that even when his so called experts are on the Board, they will be able to do much. This question of "experts" is just on the brain of many not quite conversant with the constitution of the Institution. It is in my opinion hollow cant.

External Affairs.

Coming to foreign or external affairs, I think it was Mr. S. M. Moses, as a member of the Chamber of Commerce, who observed at its General Meeting the other day, that it was time the Indian Government now paid its earnest attention to placing the Eastern exchange on a stable basis. All merchants and manufacturers trading to the East are agreed on this point. For they have all been hard hit in the past. It is only for the last few months that silver has not fluctuated so violently and has kept somewhat steady. I am one of those who would not appeal to the Government in this matter, for I do not believe in the permanence and soundness of a Currency which is artificially propped up by the State exchange; if it is to be stable at all, it should be stabled on national lines. My belief is that there are causes transpiring now which will lead to a closer parity between silver and gold without any interference by the State. It may be taken for granted that the Indian Government will continue to coin regularly about four and a half to five crores per annum. That demand for silver will be a steady one. Next, there is every chance of the opening up of the interior of China. The close of the present war in the Far East is likely to see a slow but steady economic revolution of beneficent character in China. As trade develops and exports are stimulated, the demand for silver must necessarily be great. China will need all the cheap silver that the world can give it to build its railways and start new industries. Moreover correspondence is still going on between the United States and the Chinese Government in reference to the Indemnity. Lastly, the Mexican Government has for the present ceased the coinage of private silver at its mints. All these are signs for a steady rise in the white metal. Moreover, we cannot forget the worlds growing production of gold. The record of last year was 65 millions sterling. Should the world's mines produce more year after year, there is every probability of cheap gold. And it is superfluous to state that in proportion to that cheapness the value of silver must rise. It may be that I am taking a sanguine estimate of the future better prospects of silver. I am prepared to stand corrected. But taking a survey of the situation in all the aspects presented to us to-day, I cannot help entertaining the belief that silver must sooner or later come into closer parity with gold. Such a natural transition is far more to be preferred than any State managed currency, even for China. With these observations I support the resolution.

Other Speakers.

Mr. Jehangir B. Petit strongly urged for an agitation to be started for the removal of the countervailing excise duties, and suggested the appointment of a Committee in connection therewith. The duties, he said, were imposed in the interests of Lancashire. But now that the Government of India's treasury was overflowing with large cash balances, the mill industry of India should be relieved of this unjust burden.

Mr. Jamshedjee A. Wadia was fully in accord with the views expressed by Mr. Procter as to the working hours in the mills being reduced. But he thought there should be a uniformity of working hours in all the mills, and if the Millowners did not take the initiative in the matter, the Government would have to take it. As to inoculation, he thought it was rather hard to persuade the masses to resort to it in view of the fact that even better classes of Europeans and natives fought shy of it. No doubt the Europeans did not hesitate to get themselves vaccinated against small-pox, but there did not exist the same willingness on their part to get themselves inoculated. Mr. Wadia next referred to the question of improving the condition of the mill operatives by giving them technical and other education, and by providing for them sanitary comforts. He suggested that in this matter the Millowners should follow the example of the tea planters of Northern India, and move the Legislature to allow themselves to be taxed for the improvement of the condition of their mill-hands. He thought that if that was done and they only taxed themselves at the rate of half an anna per bundle per annum, they would be able to raise an annual income of Rs. 1,60,000 a year in India, and about Rs. 80,000 in Bombay. He might say that even half that amount would go a great way in effecting the improvement which was so much to be wished for. As to the excise duties he thought that the Indian industry had not been much hampered by it. In the first year the Government revenue from that source was eleven lakhs of rupees, and the amount had now risen to twenty-six lakhs. That showed that in spite of the duties the production and consumption had increased. He thought that by these duties the Government were only doing themselves and the country wrong. For to produce cloth worth a crore of rupees the Millowners had to pay twenty lakhs as wages. Now, if the duties were removed, they would be able to produce one crore rupees worth of cloth more, and in that way twenty lakhs more of rupees would go into the pockets of the labourers. But Mr. Wadia was of opinion that if these duties were removed, the import duties should also be taken away.

Mr. Dwarkadas Dharamsey referred to the question of working hours in the mills worked with electric light, and said the Government should not interfere with the internal management of the mills, unless it was prepared to give the local industry protection against Japan which was entering into keen competition with Bombay.

Mr. Manmohandas Ramjee said working the mills with electric light for long hours was simply killing the men, and he was of opinion that the sooner the Government stepped in and legislated in the matter the better. Mr. Manmohandas contended that the excise duties were as important as the salt tax, and should be reduced if not totally abolished.

Mr. Narandas Purshotamdas deprecated that any motive should be attributed to the Government in the matter of improving the quality of cotton produced in this country. It was stated that the Government had moved in that direction to meet the clamours of Lancashire. He might at once say it was most unfair to impute such motives. He was present at the Agricultural Conference held the other day at Poona, and he could bear ample testimony to the good intentions of the Government. In that Conference questions relating to molasses, linseed, and other seeds were discussed, and he thought that experiments undertaken by Government on their farms had been doing great service to the country.

The resolution was then put to the vote and carried.

Mr. H. E. E. Procter moved that Mr. Sassoon J. David be re-elected Chairman, and the Hon'ble Mr. Vithuldas Damoder Thackersey, Deputy Chairman of the Bombay Millowners' Association for the year 1905; and that the Committee for the same period be composed as follows: Messrs. Bomonjee Dinshaw Petit, S. A. Nathan, Ahmedbhai Hubibbhoy, Dinshaw E. Wacha, N. N. Wadia, C. N. Wadia, Dwarkadas Dharamsey, Manmohandas Ramjee, Sir Dinshaw Maneckji Petit, Bart., Messrs. N. B. Saklatwala, Mulraj Khatau, Jamshedjee Ardaseer Wadia, Sir J. Cowasjee Jehangir, Kt., Messrs. Narandas Purshotamdas, H. E. E. Procter, Herbert R. Greaves, Fazulbhoy Currimbhoy Ebrahim and J. F. Bradbury.

Mr. Herbert R. Greaves seconded the proposition which was carried.

Mr. Dwarkadas Dharamsey proposed, and Mr. Narandas Purshotamdas seconded, that the Committee be empowered to pay, from the funds of the Association, to the Victoria Jubilee Technical Institute, the sum of Rs. 3,000, being the Associations' donation for the year 1905-06.

The proposition was carried.

Mr. Fazulbhoy Currimbhoy Ebrahim proposed that the Committee be empowered to pay, from the funds of the Association, the sum of Rs. 500 as a contribution towards the Sir Jamsetjee Jeejeebhoy Hospital All Saints Nursing Fund for the year 1905.

Mr. J. A. Wadia seconded the proposition which was adopted.

A resolution was then passed re-electing Mr. Nusserwanjee Sorabjee Jamsetjee Auditor of the Associations' Accounts for the year 1905 on a remuneration of Rs. 100 per annum.

The proceedings then terminated.

Bombay Municipality.

WATER RULES FOR 1905-06.

(*Vide Resolution of the Standing Committee, No.* 5661, *dated the* 15*th March* 1905.)

The Standing Committee, in exercise of the powers given by Sections 169, 170 and 276 of the City of Bombay Municipal Act, have made and prescribed the following rules for the supply of water by meter measurement, for compounding for the supply of water, for rates of charge for water-supply to Government and Port Trust premises and for rents to be charged for Municipal meters; the said rules to be in operation during the year 1905-06 :—

I. Under Section 169 (1) (*a*) of the City of Bombay Municipal Act, 1888, the Standing Committee hereby direct that, for the following classes of premises, the Commissioner may, from time to time, determine whether the water-tax shall be levied in respect of any particular premises, or whether, instead of levying such tax, he will charge for the water supplied to such premises by measurement.

And for premises in respect of which the Commissioner shall determine to charge by measurement, the Standing Committee hereby prescribe the following rates at which water shall be charged for according to class :—

Premises used as milch-cattle stables—Eight annas per 1,000 gallons.

Premises where temporary supply is required for building purposes and where a separate meter is taken—Twelve annas per 1,000 gallons.

Private stables not appurtenant to houses and separately assessed—Eight annas per 1,000 gallons.

All houses with gardens with an annual valuation of not less than Rs. 300, *provided they use the water for domestic purposes only*—Four annas per 1,000 gallons.

All properties at a greater distance than 500 *feet from the Municipal Main with which they are connected and not falling within any of the categories for which special rates are fixed*—Two annas per 1,000 gallons.

Premises in respect of which the owners apply for and agree to pay by meter measurement for larger connections for domestic purposes than are allowable under the rules for properties of that class—Four annas per 1,000 gallons.

Livery and commissioned stables—Twelve annas per 1,000 gallons.

Stables for bullocks with recklas or carts plying for hire—Eight annas per 1,000 gallons.

Railways—A uniform rate of eleven annas per 1,000 gallons.

Premises used for trade purposes of whatever kind (*except those of the nature of offices and godowns*)—Ten annas per 1,000 gallons (except as to water used for flushing urinals and latrines which shall be charged for at four annas per 1,000 gallons.)

Premises occupied by the several institutions included in the items 1 *to* 7 (*both inclusive*) *of the list attached hereto, headed "Religious, Benevolent and Educational Institutions"* (*other than such of them, if any, as may be compounded for under Sub-section* (2) *of Section* 169 *of the said Act*)—Four annas per 1,000 gallons.

In all cases the charges above specified are exclusive of the meter hire hereinafter prescribed (by Rule VI).

The Commissioner will, from time to time, report, for special directions, such premises (if any) not falling within either of the clauses hereinbefore specified, as he may hereafter consider, should be supplied and charged for by measurement, instead of levying the water-tax.

II. The Standing Committee will be prepared, under Section 169 (1) (*b*), to approve of the Commissioner compounding for the supply of water as follows:—

(*a*) In respect of premises where temporary water supply is required for building purposes and where no separate meter is taken, a compounded charge, as per following scale, in addition to the ordinary water-tax:—

Where the value of the work does not exceed				Rs. 1,000 =	Rs. 10
Do.	do.	do.	do.	„ 1,500 =	„ 14
Do.	do.	do.	do.	„ 2,000 =	„ 17
Do.	do.	do.	do.	„ 2,500 =	„ 20
Do.	do.	do.	do.	„ 3,000 =	„ 24
Do.	do.	do.	do.	„ 3,500 =	„ 27
Do.	do.	do.	do.	„ 4,000 =	„ 31
Do.	do.	do.	do.	„ 4,500 =	„ 34
Do.	do.	do.	do.	„ 5,000 =	„ 38

Where the amount exceeds Rs. 5,000, ½ per cent. is to be charged on the excess above that sum. Where it is under Rs. 1,000, one per cent. is to be charged.

(*b*) In respect of premises occupied as temporary stables upon the terms of a compounded monthly payment to be fixed on the basis of 8 annas per mensem for each animal stabled in the premises, subject to a minimum payment of Rs. 5 per mensem.

(*c*) In respect of premises occupied by either of the several institutions included in items 1—7 (both inclusive) of the list attached hereto, headed "Religious, Benevolent and Educational Institutions," upon the following terms:—

(1) As to premises occupied by either of the several institutions included in items 1 and 2 of the list for a yearly uniform compounded sum of Rs. 5.

(2) As to premises occupied by either of the several institutions included in items 3 to 7 of the list in which there is only a ½" connection with one tap for a yearly compounded sum of Rs. 5.

(3) As to premises to which water is supplied by measurement:—For a yearly compounded sum (payable by quarterly instalment in advance) based on a rate of four annas per 1,000 gallons and on the average of the consumption of the three previous years if meter readings are available for that period or, if not, for such period as may be available.

(*d*) In respect of the Government premises let to tenants; if Government undertake the collection of the sums due for water-supply notwithstanding that the water-tax on account of such premises would not be primarily leviable from the Secretary of State, upon the following terms:—

For a yearly compounded sum (payable half-yearly in advance) equal to 6½ per cent. of the rateable value of the premises, a deduction of 8·6 per cent. on such sum being allowed for vacancies.

Every composition proposed under this rule to be submitted to the Standing Committee for approval before being finally entered into.

III. Under Section 169 (2) of the said Act, the Standing Committee hereby prescribe:—That in all cases in which the Commissioner charges for water by measurement it shall be a condition of such supply that the charge to be paid for water consumed whilst a meter is out of order or under repair shall, at the discretion of the Commissioner, be based either on the average of the immediately preceding and next succeeding reliable reading, or on the reading for the corresponding period of the previous year, and that where two or more meters are fixed on any connection, the reading of that nearest the main shall alone be used for fixing the sum to be paid; and further that in all such cases, and also in each case in which a composition is made under Sub-section 2 of Section 169 of the said Act, it shall be a condition of the supply that water shall on no account be permitted to run to waste.

IV. Where, under the said Act, the water-tax would be leviable in respect of any premises from the Secretary of State for India in Council or from the Trustees of the Port of Bombay, the Standing Committee do hereby, under Section 170 of the said Act, prescribe the respective rates at which the Commissioner shall charge for water supplied by measurement to such premises as follows :—

(1) *For premises belonging to Government*—The respective minimum rates for the time being charged under clause (*a*) of Section 169 to any other person in respect of similar other properties.

(2) *For premises belonging to the Trustees of the Port of Bombay*—A uniform rate of 9½ annas per 1,000 gallons for whatever purpose the water may be used.

V. The Standing Committee direct that Counsel having advised as regards Municipal properties in the occupation of the Municipality itself that water can be charged for only in respect of such of them as the Corporation has the right to let, the charge for water supply shall be made only in respect of the Municipal properties mentioned in the margin, and that such charge shall be at the rate of annas four per 1,000 gallons consumed, *plus* hire of meters, and shall be debited against the Department taking the supply, and in the case of new works under construction, undertaken by contract, shall be recovered from the contractors concerned, and where it may be more convenient to draw water from hydrants, the charge shall be at the rate of annas eight per hydrant per hour of actual consumption.

1. Biggaries' chawls.
2. Halalkhores' chawls.
3. Dhobiwada.
4. Municipal milch-cattle stables.
5. New works under construction.

VI. The Standing Committee, under the terms of Section 276 of the said Act, hereby prescribe the following scale of rents to be charged in advance for Municipal meters let on hire to consumers :—

Size and Kind.	Hire per annum. (*a*)	Hire per half-year. (*b*)	Hire per quarter. (*c*)
	Rs.	Rs.	Rs.
½" Siemen's or other inferential meter or Bye-pass meter	5	3	2
¾" Siemen's or other inferential meter	6	4	2½
1" Do. do. do.	10	6	3½
1¼" Do. do. do.	11	7	4
1½" Do. do. do.	12	7½	4½
2" Do. do. do.	17	9	5
3" Do. do. do.	25	14	8
4" Do. do. do.	30	18	10
5" Do. do. do.	40	25	15
6" Do. do. do.	50	30	18
⅝" Positive meter	9	5½	3
½" Do. do.	12½	7¾	4
¾" Do. do.	17½	10¾	6
1" Do. do.	22¾	14	8
1½" Do. do.	34½	21½	11
2" Do. do.	51¾	34	18
3" Do. do.	84	53	27

(*a*) Charges for more than six months and up to twelve months.
(*b*) Charges for more than three months and up to six months.
(*c*) Charges for three months or less than that period.

List of Religious, Benevolent and Educational Institutions.

(1) Places for Public Worship, such as Synagogues, Churches, Atash-beherams, Agiaries, places for storing cots, etc., for bearing corpses, places occupied by corpse-bearers, Temples, Musjids, Durgas, not including Ministers' residences attached thereto.

(2) Places for the disposal of the dead, including the morgue and the rooms and residences attached thereto.

(3) Dharamshalas and residences attached thereto, dining places and Laganshalas.

(4) Schools and colleges and quarters occupied by students, the teaching staff and their families.

(5) Hospitals, dispensaries, sanitariums and asylums, including House Surgeons' and Nurses' quarters.

(6) Such institutions as the Young Men's Christian Association, Seamen's Institute, Seamen's Rest, Orphanages, Strangers' Friends Society's Home, Homes for Parsi Poor, Jamat Khanas, public drinking places and cattle-troughs.

(7) Public places of resort, *i. e.*, Bandstand, Sassoon Mechanics' Institute, libraries and museums, roads in public use, but in charge of Government.

M. N. WADIA,
Municipal Secretary.

Report on the Cotton Mills of China by Mr. J. W. Jamieson, British Commercial Attache in China.

The spinning of cotton into yarn, and the weaving of that yarn into cloth, are industries which, while not anterior to the manipulation of silk and of hemp fibres, have existed in China for over 1,000 years. Carried on practically throughout the whole Empire, their great centre has for centuries been the country where cotton is grown to the best advantage, that is to say, the seaboard round the mouth of the Yangtzu and the Hangchow Bay, and the level plains of the provinces of Hupei. And it is there where have been established the various mills for treating raw cotton by means of steam-driven machinery. The initial experiment on modern lines was made in 1891, when a semi-official Chinese syndicate started at Shanghai —the Chinese Cotton Cloth Mill and the Chinese Cotton Spinning Company. Its originators, amongst whom the then Superintendent of Northern Trade, H.E. Li Hung-Chang, was said to be included, claimed for themselves a quasi-monopoly, and prohibited outsiders who were not prepared to pay a fixed royalty for the privilege from engaging in similar undertakings. Although certain Chinese accepted this onerous condition, foreigners resented it as an undue interference with their treaty rights, and it was only when Japan, in 1895, after her war with China, inserted in the Treaty of Shimonoseki an article providing for the freedom of Japanese subjects to engage in all kinds of manufacturing industries in the open ports of China, and permitting them to import machinery for such purposes, that outsiders were afforded an opportunity of exploiting the rich field for commercial development thereby thrown open. Accordingly, so soon as the Japanese treaty came into force no time was lost in turning this particular clause to account, and the erection of no less than 11 mills—Chinese and foreign— was taken in hand. At that time the pioneer mill, which was burnt to the ground in October 1893, but subsequently rebuilt, and other Chinese-owned mills were together working some 120,000 spindles and 850 looms. Since then little inclination towards expansion has been displayed, and the following is a list, believed to be approximately accurate, of all mills running in 1904, and of such extensions as are contemplated in the near future.

List of Mills in China and Hongkong Spinning Yarn or Weaving Cloth by means of Steam-driven Machinery.

Name.	Situated at.	Number of—	
		Spindles.	Looms.
1. Hongkong Cotton Spinning, Weaving and Dyeing Company, Limited	Hongkong	55,000	...
2. E-wo Cotton Spinning and Weaving Company, Limited...	Shanghai	50,000	...
3. International Cotton Manufacturing Company, Limited...	Shanghai	40,000	...
4. Sey-chee Cotton Spinning Company, Limited ...	Shanghai	40,000	...
5. Laou Kung Mow Cotton Spinning and Weaving Company, Limited	Shanghai	32,000	...
6. Shanghai Cotton Spinning Company, Limited ...	Shanghai	20,000	...
7. Hua Sheng Cheong Cotton Cloth and Yarn Company	Shanghai	63,000	750
7A. Ta Sheng Cheong Cotton Cloth and Yarn Company	Shanghai	23,000	...
8. Hupei Cotton Spinning Company	Wuch'ang	80,000	...
8A. Hupei Cloth Weaving Company	Wuch'ang	...	1,000
9. Yü-Yüan Cotton Spinning Company	Shanghai	42,000	...
10. Ta Sheng Cotton Spinning Company...	Tungchou	40,400	...
10A* Branch of No. 10	Island of Ch'ung-ming ...	15,000	...
11. Su-Lun Cotton Spinning Company	Soochow	18,200	...
12. Tung-i Cotton Spinning Company	Hangchow	18,000	..
13. Tung-chiu-yüan Cotton Spinning Company ...	Ningpo	17,048	300
14. Tung hui-kung Cotton Spinning Company	Hsiao-shan (Shaohsing Prefecture)	16,000	...
15. Chinese New Cotton Spinning Company	Shanghai	15,000	200
16. Yeh ch'in Cotton Spinning Company	Wuhsi	10,000	...
17.* Chi-t'ai Cotton Spinning Company	Taits'ang	25,000	...
Total		619,648	2,250

* Proposed new installations.

No. 1 was started in 1898 with a view to catering for the wants of Southern China, and hoped to find in Borneo a source of supply of raw material. Such hopes, however, were not realised, and in 1900 it got into serious difficulties. A re-organisation, on the basis of writing down its 100 dol. shares to 10 dol. each, followed, and it has succeeded in paying a dividend on its reduced capital. As against an import duty at the rate of 0·60 Haikuan tael per picul,* payable by the Chinese mills on cotton from abroad, this mill obtains its supplies duty free. The counts it spins are low, chiefly 10's, and such of the output as is not disposed of locally goes principally to Amoy and Foochow. The Chinese customs statistics record the imports of Hongkong yarn into China as having been 694,400 lbs. in 1901, 816,800 lbs. in 1902 and 1,230,400 lbs. in 1903.

Nos. 2, 3, 4 and 5 represent 500,000*l.* of European capital sunk in cotton mills after the Japanese war, on the assumption that, with the aid of cheap labour, skilled management and abundant supplies of excellent cotton a handsome profit thereon would be earned. To inspire confidence they all paid small dividends in 1897-98, but have been struggling hard to keep their heads above water ever since. In 1902 Nos. 2 and 3 found it expedient to write down their capital, the one by 50 per cent. and the other by 25 per cent. and still are shareholders waiting for interest on the money subscribed. These mills are all limited liability companies, registered under the company laws of Hongkong, and their general managers are local foreign firms largely interested in the importation of textiles.

No. 6 is under Japanese management and control, the present owners having bought it at half the cost price from a foreign bank, into whose hands it fell through inability to discharge its financial obligations. It was originally Chinese-owned, and afterwards converted into a semi-foreign company.

* 1 picul = 133⅓ lbs. Average rate of the Haikuan tael, 1902—03, 2*s.* 7*d.*

Nos. 7 and 7A are the re-constructed mills of the semi-official syndicate alluded to above, and Nos. 8 and 8A are ventures of the provincial government of Hupeh erected in 1898. After some years of unsatisfactory working they have been leased to a combination of Cantonese capitalists for a period of 20 years.

The rest are companies formed by private and official Chinese, with regard to which little or no information is obtainable.

Nos. 9, 11, 12, 13 and 15, being situated at treaty ports, are more or less under foreign observation, but as to Nos. 10, 14 and 16 recourse can only be had to vague native reports.

No. 10, situated on the north bank of the Yangtzu, in the heart of the best cotton-growing country in China, in close touch with Hai-mén and Ch'ungming, both renowned for the quality of their cotton, was started in 1895. In terms of an Imperial Charter, no competitor may invade that particular district for a period of 15 years commencing from the year 1900, and its success warranted it in acquiring, in 1902, 24,000 spindles, which were imported in 1896, for a mill at Wuch'ang, and lay unopened in their cases at Shanghai, as they could not be utilised by the original purchasers. It now intends to set up a branch mill, No. 10A, on the island, of which Ch'ungming is the principal town.

Nos. 11 and 16 commenced work in 1897, and the former has experienced many vicissitudes at the hands of fortune. It has never called in the assistance of Indian cotton, and, as it relies for its supplies on T'ai-ts'ang, No. 17, when completed, will deal it another serious blow.

Nos. 12, 13 and 14 are located in another province, Chekiang, of which the best cotton grows in the Yü-yae district, and which exports large quantities of the raw fibre to the adjoining province of Fukien by junk. Neither No. 12 (1898) nor No. 13 (1896) have been conspicuous successes, but No. 14 (1901) is said to have done exceedingly well. It and No. 13 have been engaged in fighting an attempt on the part of No. 9 to encroach on their preserves by creating a rival establishment at An-ch'ang. No. 12 was designed for 25,000 spindles, and in 1900 built an oil mill for extracting oil from cotton seed, but a financial crisis supervening, the project had to be abandoned. (The accompanying rough sketch makes clear the relative positions of the various places above-mentioned.)

In the report of the China Mission of the Blackburn Chamber of Commerce, which visited Shanghai about the time when mills under foreign management were in their infancy, will be found certain speculations with regard to their future, and to the manner in which they are likely to affect imports from abroad. One of the conclusions at which the members of the Commission arrived was, that while the new mills could not be considered as directly competing with the productions of the United Kingdom, so favourable were the surrounding circumstances and conditions to the expansion of trade, that Lancashire must eventually suffer serious indirect loss.

As experience has demonstrated that in the majority of cases cotton mills in China have, from a financial point of view, far from fulfilled expectations, there is small likelihood of additional capital being embarked therein until some means of making them pay shall have been discovered, and the part they have hitherto played in the displacement of cloth by yarn, at present so noticeable, is insignificant when compared with the influence of other contributing factors. No detailed figures of their sale or output are available, but, assuming that each spindle is capable of spinning 8½ ozs. of average 13's yarn per working day, that there are 350 working days* in the year and that in 1903 500,000 spindles were continually at work, their aggregate production may be put down at 93,000,000 lbs. (equal to 9,403,570 cwts. of raw cotton). The producing power per spindle varies greatly. Hangchow spins 7·3 ozs.

* The mills in Shanghai do not work on Sundays; those up-country presumably do.

per diem, Ningpo only 4·9 ozs. (formerly 7·5 ozs.) and Hsiao-shan 8 ozs., but the above is a fair average for the Shanghai mills. China's imports of yarn in 1903 exceeded those of 1902 by 38,730,250 lbs., and amounted to 365,126,400 lbs. as against 132,242,800 lbs. in 1893. The trade in coarse yarns having completely passed out of Lancashire hands, it can matter little to her whether this demand for yarn is supplied by Indian, Japanese or Chinese mills, her interest being confined to its effect on the demand for cloth. And, as far as cloth is concerned, it may be taken for granted that the trade in the lower grades of grey goods is bound to fall off, as the native finds it more economical to weave the material for his everyday requirements himself. In 1872 yarn constituted 6 per cent. of the total value (currency) of all cotton products imported, in 1882 it had risen to 42 per cent., and in 1903 it reached no less than 52 per cent. valued at 8,814,500*l.* Of the value of foreign imports into Western China, 78 per cent. (1,869,090*l.*) has to be credited to yarn, and in addition Ch'ungking purchased 271,270*l.* worth of native steam factory twist. Spinning and weaving of cotton are in China entirely entrusted to women ; silk, on the other hand, being woven by men, and the finer and more even thread of machine-spun yarn, as compared with home-spun yarn, is doubtless a strong recommendation in its favour. Ample supplies of cheap and good yarn having relieved the female population from the necessity of spinning, they have all the more leisure to devote to weaving, and, as their hands are not allowed to remain idle for long, it stands to reason that their capacity for producing cloth is largely increased. Moreover, home-woven cloth has been found to be more durable and absorbs native dyes more readily than machine-woven cloth, and can be made in such lengths and widths as are desired by the weaver. Some explanation as to the reasons why native woven-cloth should possess this superior absorbent capacity would be very welcome, because it is a factor which has to be reckoned with. Its freedom from antiseptic chemicals, combined with the rough, soft surface of hand-spun yarn, which enters largely into its composition, may assist in imparting to it this peculiar virtue.

It would also be a matter of great interest to ascertain what qualities of native cloth the 18 provinces actually produce, but the conditions under which weaving is carried on render this an almost impossible task. A customs official stationed at Shasi has estimated the annual export from that great cloth weaving centre to be 19,995,000 lbs.

Newchuang's imports of native cloth by junk average 20,000,000 lbs. per annum, and Shanghai exports by steamer on an average 7,500,000 lbs. a year.

Incidental note may here be taken of an entirely new departure in home weaving, reported from Ssuch'uan. Three Chinese firms at Ch'ungking manufacture, entirely from British yarn, a cloth in imitation of grey shirting—the length and breadth of a piece being exactly copied—which is said to find a ready sale. For this purpose they imported 38,800 lbs. of yarn in 1902 and 40,200 lbs. in 1903.

The out-turn of foreign spindles and looms finds its market practically at the doors of the mill, some native mills taking in raw cotton from the country people and delivering a stipulated quantity of yarn in exchange. Exports to a distance pay a duty—in the nature of excise—on the basis of the import tariff of 1898, which, in the case of yarn, amounts to 70 Haikuan taels per picul. In the course of the five years (1899-1903) Shanghai exported by steamer 179,920 pieces of native machine-made cloth and 129,523,600 lbs. of yarn. For Hankow the figures are 34,980 pieces, 16,017,200 lbs.; and for Ningpo, 1,312,000 lbs.

At Ningpo a small company was formed four years ago, who turn out a blue striped cotton material, intended for underwear, which, in cheapness and durability, excels Japanese fabrics of a similar nature. They obtained a monopoly for a period of 10 years, but success led to imitation, and they have instituted legal proceedings to protect their rights. Their *modus operandi* is to distribute the work amongst the villages in the country—said to contain 4,000

looms—and the yarn, one half of which is native spun and one half spun on the Sulun mill, is dyed, weighed and the colours carefully matched at the head establishment before being given out. Each piece is some 117 yards long, takes about 20 days to complete, and the weaver receives the not extravagant remuneration of 0·10 dol. (1 dol.=2*s.*) per diem. When the work is finished the company's agents collect it and make up the cloth in pieces of 20 yards, which sell for 3·50 dol. double texture and 2·80 dol. single texture. In 1902 10,500 pieces were exported, but owing to a strong local demand the export fell to 8,727 pieces in 1903.

At the Wuch'ang Cloth Mill only 300 out of 1,000 looms are running, weaving two grades of plain grey shirtings, 40 yards by 36 inches, weighing about 15 lbs. Their value is 9*s.* 9*d.* to 10*s.* 2*d.* per piece, and in 1903 100,000 pieces were turned out, of which 9,570 pieces came under the cognisance of the maritime customs.

When account is taken of the large quantities of yarn which China annually imports from abroad—a not inconsiderable proportion thereof being spun from her own cotton—of the excellent quality of her home-grown fibre, and of the natural aptitude for spinning which her people possess, it is indeed surprising to find how unremunerative cotton spinning by machinery has, in this country, proved to be to those engaged in it. China's imports of cotton yarn since 1898, the year in which the increased spindle power first commenced running, have been as follows:—

	Quantity.					
	1898.	1899.	1900.	1901.	1902.	1903.
	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.
British	9,145,333	7,827,100	4,122,100	7,007,500	4,313,500	2,244,000
Indian	186,657,333	254,190,100	131,465,200	228,931,000	251,611,467	250,788,000
Japanese...	64,699,200	103,960,000	62,870,800	66,415,467	69,654,400	110,854,000
Hongkong	.....	...	...	694,400	816,800	1,230,400
Tongkinese	.....	...	...	...	...	10,000
Total ...	260,501,866	365,977,200	198,458,100	303,048,367	326,396,167	365,126,400

Japanese yarn first appeared in the customs statistics in 1894 with an import of 4,147,200 lbs., and China has since been, and must continue to be, the dumping ground for whatever quantities of yarn the Japanese mills produce in excess of the home consumption. Japanese cotton being of inferior quality, having a short coarse staple and very little of it being grown, supplies of raw material have to be derived from China.

These are then mixed with Indian cotton, and return in the form of yarn, principally 16's.

Cotton on leaving China, pays an export duty at the rate of 0·70 Haikuan tael per picul and yarn on re-entry an import duty at the rate of 0·90 Haikuan tael per picul. Freight and insurance both ways constitute additional charges, and, if taken into the interior, it pays a further half duty. Were it spun in its country of origin it would have to pay an excise of 0·70 tael per picul only, and could circulate freely thereafter. Cheap coal and the difference in the monetary standard of the two countries are items in favour of Japan, as the Chinese mills have not yet taken to native coal, and, when exchange is low, the gold yen has a higher purchasing capacity.

In the matter of climate and labour Japan enjoys no advantages over China, and as China's cotton grows at the doors of her mills, it is difficult to see why she should rely to so great an extent on Japanese assistance.

The counts with which India supplies the Chinese market are 20's, 16's and 10's, and here again on reckoning up the *pros* and *cons* the balance would appear to be in China's favour. The staple of her cotton is superior to that of most Indian cottons; it is much whiter in colour and much cleaner, and as a consequence it spins with less waste, produces a brighter yarn which absorbs dyes more readily, and, court for count, commands a price 6 to 7 per cent. higher than that of Indian yarn.

A rough calculation of the cost of coal per spindle would seem to give China a gain of 5 to 6 per cent., and, speaking generally, the climate is more suitable for spinning than the Indian climate. China's chief advantage, as compared with India, is the cost of labour, which, striking an average between the wages paid at Bombay and in Southern India, would appear to be 8 per cent. against China. The longer period during which it has been at work may also have imparted a certain amount of hereditary efficiency to Indian labour, as yet lacking in the case of Chinese labour.

Indian yarn suffers in the matter of duties, of freight and of other charges from the same disabilities as Japanese yarn.

Another caterer for the wants of the Chinese market has recently come forward in the shape of the two new yarn mills in Tongking, which, for the time being, spin Indian cotton and are making an effort to capture part of the Yunnan trade, which consists mainly of 10's and 20's. The old mill at Hanoi, started in 1894, contains 10,363 spindles; in 1900 a mill was put up at Haiphong with 20,000 spindles, and in 1902 a third commenced work at Namdinh with 20,736 spindles. In 1903 one of the two latter increased its spindle power by 15,000, and good reports are received as to the prospects of expansion in the cultivation of local cotton and the improvement of its staple.

The main factor which, by common consent, is said to have adversely affected the fortune of the Chinese mills, has been their failure to obtain supplies of raw cotton at reasonable prices and in good condition. The estimates made at the time when foreign capital was about to embark on the new enterprise were founded on the belief that cotton would never go beyond 11·50 taels per picul, as for years its price had remained stationary at 11 taels. In cherishing an expectation of this kind those responsible were, however, grievously in error, as rings and combinations on the part of Chinese middlemen have gradually forced up prices, until now cotton has to be bought at 90 per cent. over the figure on which the original calculations were based.

As cotton possesses a "world value," the fall in the price of silver has, of course, materially contributed to this rise, there being a difference of 24 per cent. between the prices of 1896 and 1903.

The best Chinese cotton is known as steam ginned, and the following are the average prices of that article during the last six years:—

Year.	Price per Picul.
	Taels.
1899	14·70
1900	16·70
1901	17·90
1902	18·95
1903	20·45
1904*	21·90

* Six months to June 30.

The high prices which Indian and American cottons commanded, owing to failure of crops and other causes, led to an urgent and increased demand from Japan, and frustrated all attempts to break the bull tactics of the native holders. The accompanying table shows the exports from China since 1896 and their destination :—

CHINA'S Exports of Raw Cotton during the Seasons from 1896-97 to 1903-04.

To—	Quantity.							
	1896-97.	1897-98.	1898-99.	1899-1900.	1900-01.	1901-02.	1902-03.	1903-04.
	Cwts.	Cwts.	Cwts.	Cwts.	Cwts.	Cwts.	Cwts.	Cwts.
Antwerp	...	...	202	...	9,916	...	7,842	1,953
Bremen	...	...	1,080	9,837	42,694	...	45,400	22,815
Genoa	...	...	...	...	17,260	...	293	15,174
Hamburg	...	652	4,387	2,294	45,120	1,179	35,428	36,282
Havre	...	...	...	...	1,941	...	1,775	3,161
Hongkong	9,443	6,426	10,463	7,536	27,810	4,350	7,783	12,834
Japan	513,976	393,218	279,536	361,294	605,268	359,470	1,007,151	891,345
Liverpool	...	...	...	...	20,260	392	7,825	13,378
London	368	...	23	890	4,699	...	2,458	8,651
Marseilles	...	...	408	396	2,221	...	3,010	1,900
Odessa	...	...	...	...	2,259	...	500	...
Trieste	...	...	...	...	...	44	930	10,303
Chinese ports and sundries.	2,714	2,296	2,589	1,759	24,510	84,961	100,572	93,729
Total	526,501	402,592	298,688	384,006	803,958	450,396	1,220,967	1,111,525

NOTE.—1896—1903, season taken as September to August; 1903—04, September to June.

Therefrom it will be seen that by far the largest purchaser is Japan, and force of circumstances is compelling her year by year to go farther into the interior for her supplies, of which fact an increased export of 238,000 cwts. from Hankow and of 2,500 cwts. from Shasi affords evidence. At the latter port, which has already been alluded to as a great centre of cloth weaving, the Osaka Home and Foreign Cotton Trading Company, Limited, have established an agency for the purpose of selling yarn, and purchasing in exchange local raw cotton, which is of a higher grade than the average Hupei growths. About 120,000 cwts. thereof are shipped annually to Ssuch'uan, and the introduction of hydraulic presses is contemplated with a view to reducing the size of the bales from that country, and rendering them more suitable for transport by steamer. In time, no doubt, a spinning mill will be erected there, and its prospects of success ought to be very good.

Next in order to Japan as a buyer of Chinese cotton comes Germany, where it is mixed with wool and utilised in the composition of what is known as "Saxony yarn," its hard fibre rendering it peculiarly adapted for such purposes.

It may, in this connection, be of interest to note that the limit of the amount of Chinese cotton available for export is asserted to be 1,250,000 cwts. per annum, and that this limit having now been reached, no greater quantities can go forward.

When local mills cannot obtain a sufficiency of native cotton, they are forced, in self defence, to procure supplies from India, and the anomaly is presented of a vast cotton-growing country being an importer of cotton from abroad, diverting her own mills from the purposes for which they were started and lowering the quality of the yarns produced.

Since 1896 China has imported the following quantities of cotton :—

Year.	Quantity.
	Cwts.
1896	118,000
1897	190,790
1898	272,620
1899	331,390
1900	160,420
1901	303,400
1902	295,920
1903	70,834

The 1903 returns show a most gratifying decrease, and may indicate that this unnatural state of things is coming to an end.

Another very serious drawback with which the mills have to contend is the dishonest practice of adulterating cotton with water, and few of the mill-owners' complaints are louder than those with regard to watered cotton. An attempt has been made to stamp out this evil with the aid of official support, but the inculcation of morality by legislative action is nowhere an easy matter. Seeing how Chinese officialdom in the past has neglected to protect the vital commercial interests, centering in tea and silk, it is almost too much to hope that they will take any steps to encourage intelligent methods of fostering the cotton industry by extending areas of cultivation or of improving the quality of the fibre by devoting care to the selection of seeds and the use of fertilisers. Nor is there much prospect of their freeing it from the incidence of vexatious imposts and petty interference. Their time-honoured attitude of regarding industrial development simply as an additional means of extracting revenue is, unfortunately, not likely to undergo a change.

Other reasons why the cotton spinning industry in China has hitherto proved a comparative failure are to be found in lack of experience, everything at first being more or less in the nature of experiment; in the absence of skilled management, because, as was pointed out by the Blackburn Commission, a specific knowledge of the internal economy and working of a large manufacturing concern is essential if the best results are to be obtained; in the severe competition of India and Japan, which countries, the latter more especially, can place their surplus production on the market to advantage; in financial difficulties, the result in some instances of under-capitalisation, whereby earnings, which would otherwise be devoted to the payment of dividends, go to defray interest on over-drafts, and, in the case of the European companies, to their inability to write off anything for depreciation.

In the beginning ill-advised competition to secure competent labour proved very harmful, and it is satisfactory to know that this obstacle has at length been successfully overcome.

Chinese labour is becoming more efficient year by year, it is more amenable to discipline and shows a greater disposition to keep steadily at work. Although it commands higher remuneration than before, its increased productive power makes a reduction of the aggregate number of hands employed possible, and brings about a corresponding diminution of the wages bill. In Shanghai 70 per cent. of it is female labour, but in the country most of the operatives are boys.

Considering the class from which they are drawn, the hands display great intelligence, and with practice acquire remarkable dexterity. Were it at all practicable to employ Cantonese an even higher standard might be attained, as the facility with which the southern Chinese grasp the uses of machinery is more marked than in the case of the natives of Central China.

The working day lasts 13½ hours, night shifts working 10 hours extra. From an economical point of view it is said to be better to confine the hands to day work only, and but few mills work day and night throughout the year. As is not unreasonably to be expected, there is a slight falling-off in efficiency during the summer months. Many mills in Shanghai pay by "piece-work," and the average amount earned is 28 c. (say 6*d.*) a day. Elsewhere much lower rates of wages obtain. Roughly speaking the Shanghai mills spend 20,000 dol. weekly in wages, and, as they are at pains to house their hands properly, the lot of the worker has been greatly improved.

With regard to the number of hands employed estimates vary, Shanghai according to one authority employing 9,000, according to another 15,000. The latter is possibly meant to include those engaged on night work. The Hangchow mill, with 18,000 spindles, employs 1,400 ; the Soochow mill, on the other hand, with the same number of spindles, only 800.

The average count of yarn spun by Chinese mills is between 12's and 13's, some of it made from pure cotton and some from cotton and waste mixed. The percentage of loss at the engine head is about 11 per cent.—3·40 piculs of cotton equal 3 piculs of yarn, equal to 1 bale of 400 lbs. Yarns for export are press-packed in bales, those for local consumption are distributed at the mills. Certain mills pack in weights suitable for conveyance by pack animal or coolie, and, as up-country business extends, this is a point which ought not to be lost sight of.

To illustrate how prices have advanced in sympathy with cotton, the following quotations of a press-packed bale of 14's yarn, spun from pure cotton and weighing 400 lbs., are given. Yarn, not press-packed, and which does not pay duty, costs 3 taels per bale less :—

Year.	Prices.
	Taels.
1899	68·40
1900	72·50
1901	78·00
1902	83·10
1903	90·20
1904*	92·40

* Six months to June 30.

If one wishes to institute a comparison between these prices and the prices which Indian and Japanese yarn fetch, one is confronted with the difficulty that there is, so to speak, no common denominator, inasmuch as India and Japan export no 14's, to China. Their principal business lies in 16's ; but, assuming the cost of spinning 14's to be 2 taels below the cost of spinning 16's, the following average prices may be of interest. (It should be borne in mind that the comparison is farther defective, in that variation in price between different qualities and "chops" is very great.) The averages are based on a bale weighing 400 lbs. of (*a*) Indian 16's ; James Greaves' spinnings. (*b*) Japanese 16's, Hirano Mill, "Horse" chop :—

Year.	Average Price.	
	(*a*)	(*b*)
	Taels.	Taels.
1899	62·65	66·00
1900	70·50	73·60
1901	74·00	81·50
1902	82·65	88·00
1903	87·00	91·50
1904*	88·00	94·10

* Six months to June 30.

The more rigid methods in force in mills under foreign supervision must, beyond question, result in the outturn of a superior article, maintain the plant in a very high state of relative efficiency, and, all round, cause a standard more elevated than that of the native mills to prevail, even though they may have nothing left over at the end of the year wherewith to solace their shareholders. Hence it may be that, for the time being at least, the shareholders in the latter may have greater reason to be satisfied with the return they receive on their capital. The mills in the country are undoubtedly more advantageously situated than the mills of Shanghai, their expenses are very much lower, the absence of any provision for depreciation or insurance does not weigh heavily on the minds of the management, and, consequently, they may feel justified in declaring dividends, under circumstances when the cautious European would never dream of doing so. Until a year of cheap cotton and abnormal profit shall have enabled the foreign mills to shake off their present incubus of debt there is, however, little hope for them of any amelioration of existing conditions.

March 1905.

STATISTICS.

Appendix S.

STATEMENT of Imports of Piece-Goods (Grey, Bleached, Coloured and Printed) and of Yarns (Grey and Dyed) from Great Britain into Bombay, Calcutta and Madras, from the years 1851 *to* 1904, *both inclusive.*

Year.	Piece-Goods.			Yarns.		
	Bombay.	Calcutta.	Madras.	Bombay.	Calcutta.	Madras.
	Yards.	Yards.	Yards.	Lbs.	Lbs.	Lbs.
1851	116,351,747	213,757,342	3,712,729	6,384,321	18,281,592	1,289,835
1852	113,567,856	163,851,027	3,731,934	5,681,870	13,946,539	1,503,000
1853	130,838,032	172,098,876	8,038,050	6,849,463	15,350,537	2,068,994
1854	192,200,419	271,208,527	8,695,054	7,668,093	15,650,107	1,946,584
1855	128,193,027	256,069,194	6,542,924	7,447,529	16,901,310	2,107,969
1856	130,459,853	275,016,345	4,517,561	4,559,670	15,224,557	1,923,999
1857	137,761,636	235,190,273	9,375,347	2,838,644	10,691,863	2,370,741
1858	281,836,364	416,362,074	15,431,647	8,744,517	18,369,490	4,036,325
1859	307,086,509	520,899,016	20,425,632	12,899,875	20,043,485	5,741,441
1860	267,443,986	403,351,123	20,648,072	4,571,134	16,641,847	5,656,930
1861	272,573,717	418,671,687	14,628,188	5,578,828	13,933,256	3,694,985
1862	178,803,604	295,508,637	9,748,215	4,811,384	9,594,896	1,675,239
1863	232,321,038	234,645,916	16,352,677	5,592,995	10,394,931	3,702,562
1864	189,812,984	223,036,538	14,787,062	4,268,662	8,742,699	3,447,635
1865	175,486,677	319,047,954	17,291,103	4,073,811	6,981,809	2,232,948
1866	243,476,368	351,572,331	22,081,805	6,877,968	10,795,517	4,629,986
1867	316,784,109	528,434,956	23,258,498	6,568,619	13,006,019	4,684,638
1868	555,337,050	619,101,683	31,793,397	7,780,303	13,236,453	6,873,398
1869	296,158,439	518,741,346	29,683,469	7,981,949	11,858,210	7,773,636
1870	272,898,226	687,639,911	45,750,099	9,946,299	16,816,936	8,649,598
1871	305,416,233	684,926,367	47,560,133	6,097,531	12,041,848	6,876,841
1872	262,849,273	657,123,291	48,177,571	6,163,813	11,490,636	8,616,040
1873	349,631,830	664,987,114	57,666,809	8,667,090	11,192,248	8,918,841
1874	292,843,697	765,762,164	49,878,834	8,867,978	14,041,520	10,510,639
1875	305,917,934	744,439,224	44,683,288	6,863,763	12,945,102	10,104,020
1876	356,940,508	733,913,330	54,875,423	8,246,211	12,090,167	9,664,609
1877	354,779,192	885,688,850	39,106,318	10,624,710	14,364,841	8,683,595
1878	344,068,807	749,233,431	47,038,579	7,754,005	13,967,396	8,373,916
1879	343,811,233	788,759,250	61,375,691	7,469,113	10,580,436	9,581,363
1880	531,050,559	1,007,531,497	77,010,037	13,024,923	16,446,089	12,108,002
1881	544,890,697	947,329,460	82,451,852	12,326,706	13,597,371	11,099,762
1882	500,248,293	883,611,784	106,615,818	12,019,123	14,780,667	13,069,871
1883	572,738,196	878,949,353	107,868,579	16,220,463	13,478,764	11,033,824
1884	568,220,318	908,294,475	120,841,003	14,299,380	15,313,840	13,114,875
1885	547,773,459	911,987,148	93,757,204	14,132,372	13,473,067	9,597,197
1886	700,061,881	1,159,407,968	143,318,736	17,087,709	14,177,149	13,937,810
1887	585,502,258	988,370,500	117,502,619	14,990,151	14,040,137	13,432,638
1888	652,344,548	1,045,951,384	138,271,060	16,595,176	14,778,545	14,570,258
1889	634,608,171	1,031,000,980	144,140,943	13,011,348	11,836,681	13,393,848
1890	665,550,786	1,037,911,379	115,224,797	15,805,515	12,455,601	13,284,690
1891	572,065,309	961,686,226	108,083,576	15,526,869	12,484,617	14,666,189
1892	548,944,867	1,013,742,658	93,892,712	12,427,053	10,108,327	10,390,439
1893	604,439,138	1,009,441,511	106,086,291	10,466,233	13,124,097	11,387,889
1894	719,324,449	1,161,138,343	140,749,235	11,723,808	10,529,734	12,547,763
1895	484,780,087	925,203,136	99,427,366	10,857,586	10,689,066	10,188,466
1896	574,410,316	1,163,967,702	86,265,292	11,649,977	13,493,663	15,402,931
1897	472,597,133	932,328,974	121,396,515	11,788,246	13,299,211	13,650,022
1898	557,557,951	1,202,254,978	91,950,978	10,238,969	11,412,068	11,673,678
1899	611,556,220	1,266,926,546	93,492,746	10,441,484	10,729,842	11,532,812
1900	461,938,302	1,086,463,274	120,383,837	5,892,081	9,435,371	9,496,085
1901	629,976,200	1,127,753,500	129,392,500	7,911,750	11,050,890	9,564,200
1902	475,541,800	1,176,051,500	119,878,000	6,299,820	7,411,640	9,438,560
1903	520,373,400	1,119,542,300	129,898,800	5,300,460	6,442,050	6,699,580
1904	593,591,100	1,193,265,900	145,618,800	6,221,400	6,613,460	8,056,710

ANNUAL IMPORTS FROM EUROPE INTO BOMBAY OF PIECE-GOODS AND YARNS FROM 1ST JANUARY 1895 TO 31ST DECEMBER 1904.

DESCRIPTION OF GOODS.	From 1st Jan. to 31st Dec. 1895.	From 1st Jan. to 31st Dec. 1896.	From 1st Jan. to 31st Dec. 1897.	From 1st Jan. to 31st Dec. 1898.	From 1st Jan. to 31st Dec. 1899.	From 1st Jan. to 31st Dec. 1900.	From 1st Jan. to 31st Dec. 1901.	From 1st Jan. to 31st Dec. 1902.	From 1st Jan. to 31st Dec. 1903.	From 1st Jan. to 31st Dec. 1904.
GREY GOODS.										
36 in. & under × 37/9 yds. Shirtings	Pcs. 14,28,336	Pcs. 13,21,463	Pcs. 8,05,059	Pcs. 10,73,940	Pcs. 9,39,757	Pcs. 5,91,977	Pcs. 7,69,437	Pcs. 4,64,790	Pcs. 5,76,095	Pcs. 7,87,868
37/9 „ do. do. 5½ lbs. & under ...	„ 4,261	„ 6,295	„ 7,972	„ 22,838	„ 24,744	„ 21,859	„ 14,577	„ 3,789	„ 6,645	„ 300
„ „ do. do. 6½ lbs. do. ...	„ 36,712	„ 52,827	„ 18,288	„ 15,210	„ 29,864	„ 79,251	„ 1,00,120	„ 78,905	„ 1,12,216	„ 48,279
„ „ do. do. 7 lbs. do. ...	„ 1,97,528	„ 1,49,644	„ 1,98,749	„ 1,64,387	„ 1,36,755	„ 1,16,975	„ 65,324	„ 73,162	„ 56,800	„ 25,006
„ „ do. do. 7½ lbs. do. ...	„ 2,21,380	„ 94,551	„ 2,20,012	„ 2,03,547	„ 1,73,723	„ 1,04,626	„ 88,196	„ 91,745	„ 86,247	„ 89,276
„ „ do. do. 8½ lbs. do. ...	„ 4,22,943	„ 2,63,195	„ 5,16,622	„ 6,23,956	„ 7,97,166	„ 3,61,514	„ 5,47,143	„ 4,31,428	„ 5,41,280	„ 2,96,559
„ „ do. do. 9 lbs. do. ...	„ 1,73,177	„ 1,03,791	„ 1,42,860	„ 1,80,306	„ 2,50,113	„ 88,968	„ 1,53,624	„ 2,46,386	„ 2,32,233	„ 1,51,465
„ „ do. do. above 9 lbs.	„ 73,246	„ 1,25,327	„ 1,26,773	„ 1,09,057	„ 1,82,570	„ 80,638	„ 75,154	„ 87,057	„ 1,01,187	„ 67,621
40/5 „ do. do. 6 lbs. & under ...	„	„	„	„	„	„	„ 150	„	„ 1,200	„ 878
„ „ do. do. 7 lbs. do. ...	„ 2,471	„ 659	„	„ 836	„	„ 1,097	„ 5,196	„ 3,078	„ 76,183	„ 66,771
„ „ do. do. 8 lbs. do. ...	„ 2,49,805	„ 1,79,933	„ 2,40,769	„ 2,05,787	„ 2,07,727	„ 2,14,494	„ 2,13,340	„ 1,97,725	„ 1,85,092	„ 1,07,266
„ „ do. do. 9 lbs. do. ...	„ 1,89,623	„ 1,16,073	„ 1,62,045	„ 1,32,565	„ 2,09,156	„ 1,90,609	„ 2,62,940	„ 1,95,422	„ 1,70,924	„ 1,77,426
„ „ do. do. above 9 lbs.	„ 3,21,020	„ 2,60,557	„ 2,81,002	„ 3,07,547	„ 4,07,316	„ 1,89,229	„ 4,00,422	„ 3,99,897	„ 3,48,704	„ 3,80,278
46/49 „ do. do. all weights ...	„ 3,65,656	„ 3,11,074	„ 3,31,244	„ 3,70,956	„ 4,22,409	„ 2,03,655	„ 2,51,397	„ 1,90,369	„ 1,89,493	„ 1,34,427
50/52 „ do. do. do. ...	„ 84,269	„ 65,167	„ 1,07,337	„ 1,02,413	„ 1,13,286	„ 58,163	„ 81,625	„ 61,739	„ 85,236	„ 62,311
53/60 „ do. do. do. ...	„ 55,491	„ 55,455	„ 47,866	„ 51,575	„ 91,691	„ 70,345	„ 73,892	„ 91,002	„ 88,952	„ 68,979
All widths × 23/24 yds. T. Cloths 4 lbs. & under ...	„ 537	„	„	„	„	„	„	„	„ ...O..	„ .....
„ do. do. 5 lbs. do. ...	„ 46	„	„	„ 200	„ 100	„	„ 200	„	„	„ .....
„ do. do. 6 lbs. do. ...	„ 5,264	„ 779	„ 279	„ 502	„ 2,711	„	„ 1	„ 589	„ 297	„ 600
„ do. do. 7 lbs. do. ...	„ 2,65,484	„ 1,36,508	„ 1,42,027	„ 1,70,264	„ 1,79,453	„ 1,33,575	„ 2,79,014	„ 1,40,624	„ 1,75,130	„ 1,17,883
„ do. do. above 7 lbs.	„ 46,156	„ 41,696	„ 28,109	„ 30,199	„ 25,827	„ 11,510	„ 16,009	„ 1,410	„ 15,447	„ 16,767
29 in. & under × 22/24 yds. Madapollams 2½ lbs. & under.	„ 49,978	„ 20,083	„ 29,487	„ 46,957	„ 21,948	„ 20,677	„ 76,020	„ 21,135	„ 38,662	„ 48,206
„ do. do. 2¾ lbs. & over.	„ 43,710	„ 23,356	„ 51,825	„ 61,107	„ 42,953	„ 27,355	„ 81,827	„ 19,225	„ 21,201	„ 25,911
30/32 in. do. do. 2½ lbs. & under.	„ 1,950	„	„ 3,647	„	„	„ 3,999	„	„	„	„ .....
„ do. do. 2¾ lbs. & over.	„ 83,949	„ 39,475	„ 29,943	„ 30,275	„ 25,740	„ 13,647	„ 18,015	„ 15,231	„ 17,366	„ 2,820
38/42 in. do. do. 3 to 4½ lbs. ...	„ 54,640	„ 16,422	„ 43,161	„ 15,784	„ 4,020	„ 7,976	„ 92,661	„ 22,228	„ 417	„ 7,877
43 in. & over do. do. 4½ to 6½ lbs. ...	„ 1,85,136	„ 1,12,756	„ 1,48,344	„ 2,17,568	„ 1,94,602	„ 1,78,886	„ 2,49,440	„ 1,29,379	„ 44,975	„ 66,678
18 24 in. × 28/30 yds.* Printers 2 to 3 lbs. ...	„ 1,44,056	„ 14,306	„ 18,065	„ 58,316	„ 61,238	„ 5,701	„ 39,147	„ 5,085	„ 4,069	„ 22,574
Above 24 in. × do. do. above 3 lbs.	„ 37,106	„ 31,376	„ 22,450	„ 16,103	„ 14,306	„	„ 4,410	„ 11,624	„ 1,250	„ 1,500
34 to 45 in. × 18/20 yds. Jacconets, all weights	„ 7,14,810	„ 5,95,975	„ 5,79,630	„ 5,62,372	„ 5,65,623	„ 2,98,347	„ 6,86,642	„ 2,49,179	„ 3,26,575	„ 2,90,730
44 in. × 22 yds. do. do	„ 3,21,674	„ 2,92,659	„ 4,47,745	„ 3,58,723	„ 3,69,167	„ 3,94,145	„ 4,48,521	„ 3,16,021	„ 4,67,847	„ 6,50,800
Above 44 in. × 22 yds. do. do.	„ 4,16,377	„ 4,15,486	„ 3,80,447	„ 5,26,500	„ 3,89,181	„ 4,60,181	„ 3,73,994	„ 4,54,723	„ 4,90,030	„ 3,73,772
36/9 in. × 18 to 23 yds. Mulls do.	„ 3,42,753	„ 2,40,674	„ 4,06,853	„ 4,65,478	„ 3,68,803	„ 5,10,841	„ 5,87,191	„ 3,23,519	„ 5,27,454	„ 3,88,383
40 42 in. × 19 20 yds. do. do.	„ 1,92,140	„ 1,60,556	„ 2,34,099	„ 1,50,314	„ 1,03,585	„ 1,69,994	„ 1,82,376	„ 79,112	„ 1,03,527	„ 1,58,021
Above 43 in. × 19/20 yds. do. do.	„ 71,563	„ 45,430	„ 61,369	„ 22,982	„ 15,991	„ 55,555	„ 63,386	„ 21,918	„ 22,049	„ 89,850
Domestics	„ 478	„	„	„	„	„	„	„	„	„ .....
Longcloths	„ 388	„	„	„	„	„	„	„	„	„ .....
Twills and Drills	„ 2,86,789	„ 3,51,470	„ 3,28,264	„ 3,39,317	„ 4,01,156	„ 3,37,218	„ 3,67,714	„ 2,98,942	„ 3,39,770	„ 3,23,785
Dimities or Spots	„ 167	„	„	„	„	„	„	„	„	„ .....
Chudders	„ 2,171	„	„	„	„	„	„	„	„	„ .....
Total for 12 Months	Ps. 70,93,150	Ps. 56,52,882	Ps. 61,62,341	Ps. 66,36,981	Ps. 67,72,681	Ps. 50,02,998	Ps. 66,69,655	Ps. 47,26,439	Ps. 54,54,263	Ps. 59,50,967

* Printers of 60 yds. are entered in the equivalent of 30-yd. pieces, and similarly with T. Cloths of 48, 72 and 96 yards.

Description of Goods.	From 1st Jan. to 31st Dec. 1895.	From 1st Jan. to 31st Dec. 1896.	From 1st Jan. to 31st Dec. 1897.	From 1st Jan. to 31st Dec. 1898	From 1st Jan. to 31st Dec. 1899.	From 1st Jan. to 31st Dec. 1900.	From 1st Jan. to 31st Dec. 1901.	From 1st Jan. to 31st Dec. 1902.	From 1st Jan. to 31st Dec. 1903.	From 1st Jan. to 31st Dec. 1904.
WHITE GOODS.										
28/36 in. × 39/42 yds. Shirtings and Longcloths	Pcs. 4,84,246	Pcs. 7,03,249	Pcs. 4,51,298	Pcs. 5,35,152	Pcs. 6,66,078	Pcs. 5,18,993	Pcs. 8,90,909	Pcs. 5,65,083	Pcs. 6,65,771	Pcs. 9,14,165
28/39 in. × 18/20 yds. Jacconets	„ 4,91,891									
40 in. & wider „ do.	„ 39,271	„ 6,15,049	„ 4,28,556	„ 5,28,703	„ 3,43,240	„ 2,52,772	„ 5,17,724	„ 1,79,628	„ 1,24,817	„ 3,24,634
26/39 in. × „ Mulls and Nainsooks	„ 34,88,001	„ 37,77,257	„ 59,97,687	„ 48,29,693	„ 47,18,140	„ 42,49,615	„ 51,10,352	„ 37,90,090	„ 46,03,488	„ 50,94,414
40/45 in. × „ do. do.	„ 3,77,604	„ 4,91,478	„ 5,98,200	„ 7,53,189	„ 10,21,754	„ 10,71,745	„ 14,79,168	„ 8,36,093	„ 5,14,282	„ 8,69,782
46 in. and upwards do. do.	„ 6,04,937	„ 8,34,631	„ 7,10,017	„ 8,54,263	„ 9,06,600	„ 8,49,067	„ 12,47,332	„ 9,74,576	„ 7,63,333	„ 10,40,741
32 to 42 in. × 12 to 18 yds. Cambrics	„ 20,951	„ 15,906	„ 10,395	„ 5,834	„ 6,936	„ 2,648	„ 17,841	„ 20,466	„ 8,197	„ 14,372
Twills and Drills	„ 39,498	„ 70,657	„ 34,710	„ 46,324	„ 56,820	„ 72,176	„ 1,22,154	„ 48,147	„ 66,495	„ 88,995
Total for 12 months ...	Pcs. 55,46,398	Pcs. 65,08,227	Pcs. 62,30,863	Pcs. 75,53,158	Pcs. 77,19,568	Pcs. 70,17,018	Pcs. 93,85,480	Pcs. 64,14,083	Pcs. 67,46,383	Pcs. 83,47,103
TURKEY RED GOODS.										
24 in. × 28 yds. Cambrics	Pcs. 2,98,312	Pcs. 3,30,750	Pcs. 1,96,536	Pcs. 3,42,264	Pcs. 6,36,650	Pcs. 2,38,797	Pcs. 2,49,783	Pcs. 3,23,222	Pcs. 3,15,749	Pcs. 4,16,091
32 in. × 24 yds. do.	„ 13,762	„ 28,326	„ 12,830	„ 19,593	„ 5,567	„ 4,469	„ 8,081	„ 5,971	„ 6,462	„ 4,419
All Widths and Lengths Shirtings	„ 2,33,360	„ 2,67,750	„ 1,45,577	„ 2,02,246	„ 4,22,816	„ 1,34,765	„ 2,75,846	„ 2,66,151	„ 2,59,747	„ 2,61,738
30 in. and over × 19/20 yds. Mulls	„ 60,693	„ 93,006	„ 25,677	„ 27,839	„ 63,267	„ 22,737	„ 59,484	„ 29,209	„ 18,421	„ 40,678
Do. do. Jacconets	„ 14,187	„ 21,678	„ 12,990	„ 17,128	„ 13,121	„ 4,043	„ 8,271	„ 15,719	„ 6,041	„ 8,544
All widths and lengths, Twills and Dimities	„ 59,024	„ 37,145	„ 25,101	„ 19,137	„ 26,759	„ 15,607	„ 29,971	„ 17,938	„ 18,326	„ 29,673
33/39 in. × 9/12 yds. Lappets	„ 7,683	„ 10,210	„ 14,190	„ 4,675	„ 2,590	„ 731	„ 1,761	„	„ 1,704	„ 800
30 in. and over × 19/20 yds. Mull Stripes	„ 12,091	„ 7,579	„ 2,396	„ 4,837	„ 4,283	„ 5,483	„ 1,700	„ 1,680	„ 892	„ 600
All widths and lengths, Prints and Chintz	„ 2,50,924	„ 3,05,339	„ 2,48,178	„ 6,26,193	„ 6,68,042	„ 3,79,964	„ 3,72,526	„ 6,51,843	„ 5,08,042	„ 4,72,735
30 in. & over × 20 yds. Printed Jacconets	„ 1,11,657	„ 1,58,856	„ 1,04,619	„ 1,35,463	„ 1,84,673	„ 90,988	„ 1,99,069	„ 1,49,168	„ 2,04,956	„ 2,11,057
Scarfs and Sarries	„ 8,40,895	„ 10,00,902	„ 3,84,721	„ 10,54,914	„ 13,35,883	„ 7,01,167	„ 7,04,926	„ 9,24,238	„ 11,31,078	„ 15,31,283
Bandanas or Handkerchiefs ...	„ 2,25,435	„ 1,96,977	„ 2,51,333	„ 3,70,075	„ 6,02,790	„ 3,16,242	„ 2,16,996	„ 2,26,159	„ 9,20,795	„ 6,36,181
Total for 12 months ...	Pcs. 21,28,023	Pcs. 24,58,518	Pcs. 14,24,148	Pcs. 28,23,764	Pcs. 39,66,241	Pcs. 19,14,993	Pcs. 31,28,354	Pcs. 26,11,298	Pcs. 33,98,213	Pcs. 36,13,799
WOOLLENS.										
Army Cloth	Yds. 1,87,721	Yds. 2,07,917	Yds. 96,586	Yds. 1,40,006	Yds. 2,58,859	Yds. 79,013	Yds. 2,24,213	Yds. 1,65,485	Yds. 2,03,022	Yds. 2,29,514
Spanish Stripes or Ladies' Cloth	„ 2,86,218	„ 2,14,504	„ 83,027	„ 1,70,105	„ 3,70,972	„ 1,26,698	„ 3,73,247	„ 1,62,519	„ 1,50,836	„ 1,83,114
Flannels	„ 20,15,024	„ 22,96,178	„ 11,77,910	„ 17,76,647	„ 22,19,994	„ 19,99,888	„ 34,81,908	„ 17,02,588	„ 18,57,178	„ 37,50,121
Broad Cloth	„ 1,82,683	„ 1,66,475	„ 70,023	„ 1,35,348	„ 1,93,842	„ 1,26,210	„ 2,33,657	„ 1,77,686	„ 1,60,048	„ 1,48,505
Alpacca, Merino, Italian, &c.	„ 7,63,892	„ 9,08,995	„ 4,93,283	„ 5,12,478	„ 4,60,876	„ 4,83,001	„ 8,88,73[illegible]	„ 5,80,252	„ 7,70,072	„ 12,61,626
Union Cloth	„ 1,74,185	„ 1,59,757	„ 49,035	„ 56,289	„ 81,550	„ 57,247	„ 54,04[illegible]	„ 30,758	„ 53,739	„ 56,457
Long Ells	„ 27,396	„ 3,840	„	„ 18,945	„ 3,360	„	„	„	„	„ 1,960
All other Sorts	„ 27,20,062	„ 32,36,825	„ 15,25,720	„ 17,14,668	„ 34,11,375	„ 23,82,967	„ 37,23,077	„ 26,86,936	„ 42,28,511	„ 60,81,300
Total for 12 months ...	Yds. 63,57,180	Yds. 71,94,491	Yds. 34,95,584	Yds. 45,24,480	Yds. 70,00,828	Yds. 52,55,024	Yds. 89,78,[illegible]88	Yds. 54,66,224	Yds. 74,23,506	Yds. 1,17,12,597

DESCRIPTION OF GOODS.	From 1st Jan. to 31st Dec. 1895.	From 1st Jan. to 31st Dec. 1896.	From 1st Jan. to 31st Dec. 1897.	From 1st Jan. to 31st Dec. 1898.	From 1st Jan. to 31st Dec. 1899.	From 1st Jan. to 31st Dec. 1900.	From 1st Jan. to 31st Dec. 1901.	From 1st Jan. to 31st Dec. 1902.	From 1st Jan. to 31st Dec. 1903.	From 1st Jan. to 31st Dec. 1904.
FANCY GOODS.										
Dyed Shirtings	Pcs. 1,08,263	Pcs. 1,98,654	Pcs. 1,63,016	Pcs. 2,38,221	Pcs. 2,79,072	Pcs. 1,89,168	Pcs. 3,87,768	Pcs. 2,16,124	Pcs. 2,63,778	Pcs. 2,55,156
„ Madapollams or Cambrics	„ 55,177	„ 1,09,408	„ 99,478	„ 1,28,294	„ 1,12,913	„ 53,683	„ 98,016	„ 73,811	„ 1,53,988	„ 1,69,307
„ Jacconets	„ 19,952	„ 23,870	„ 26,556	„ 9,751	„ 5,924	„ 4,609	„ 12,672	„ 11,748	„ 2,774	„ 1,389
Prints and Chintz, all Widths and Lengths	„ 10,19,678	„ 13,87,624	„ 7,91,893	„ 14,50,566	„ 18,10,791	„ 8,85,291	„ 15,29,044	„ 13,41,706	„ 14,63,975	„ 17,35,760
Printed Muslins and Jacconets, all Widths and Lengths	„ 2,84,270	„ 4,46,004	„ 72,818	„ 1,11,370	„ 1,77,121	„ 82,782	„ 1,85,951	„ 1,22,952	„ 2,06,264	„ 3,05,677
Lappets, White	„ 1,30,314	„ 1,21,675	„ 79,294	„ 76,289	„ 94,219	„ 73,625	„ 88,882	„ 1,19,070	„ 1,18,640	„ 1,37,945
„ Coloured	„ 63,902	„ 69,586	„ 41,368	„ 20,048	„ 23,220	„ 18,751	„ 37,247	„ 28,358	„ 24,859	„ 48,865
Lappet and Lace Scarfs	„ 33,341	„ 53,414	„ 22,265	„ 24,044	„ 63,388	„ 40,733	„ 21,182	„ 38,484	„ 60,543	„ 31,982
Dhoties, Grey	„ 30,44,779	„ 36,27,489	„ 30,94,888	„ 27,71,211	„ 36,73,588	„ 13,29,728	„ 31,75,470	„ 30,46,054	„ 16,58,936	„ 24,71,494
„ Bleached	„ 5,40,275	„ 5,40,165	„ 4,11,254	„ 4,43,666	„ 4,37,520	„ 5,04,471	„ 8,04,952	„ 3,32,250	„ 3,53,252	„ 6,41,489
Scarfs and Sarries, Grey	„ 1,83,629	„ 2,97,059	„ 2,44,584	„ 1,69,086	„ 2,16,222	„ 1,12,639	„ 1,14,355	„ 2,07,459	„ 1,44,080	„ 94,811
„ „ Bleached	„ 3,91,391	„ 5,17,573	„ 2,69,829	„ 3,36,091	„ 5,21,703	„ 4,13,435	„ 3,45,777	„ 4,17,921	„ 4,03,169	„ 3,24,046
„ „ Colored and Printed ...	„ 4,26,902	„ 4,50,978	„ 5,39,368	„ 3,69,867	„ 6,89,986	„ 6,62,041	„ 9,33,055	„ 11,17,132	„ 12,46,646	„ 16,00,954
Book Muslins	„ 1,12,922	„ 3,31,310	„ 1,34,489	„ 1,11,528	„ 1,66,611	„ 3,45,924	„ 5,04,356	„ 1,75,445	„ 3,06,119	„ 4,30,036
Gauze, Plain, Figured, Striped and Checked ...	„ 1,83,525	„ 4,75,366	„ 2,70,923	„ 1,73,342	„ 4,08,525	„ 2,20,784	„ 5,73,543	„ 2,75,827	„ 5,72,807	„ 6,61,616
Doria and Mull Stripes	„ 10,05,337	„ 11,45,682	„ 7,31,873	„ 5,43,535	„ 7,37,922	„ 3,99,639	„ 9,29,273	„ 6,06,042	„ 3,39,040	„ 7,07,718
Cotton Ticks	„ 5,184	„ 6,353	„ 1,614	„ 2,477	„ 4,526	„ 1,950	„ 3,689	„ 3,104	„ 6,166	„ 4,051
Twills and Drills, Colored	„ 58,284	„ 63,099	„ 61,437	„ 78,723	„ 1,09,659	„ 76,158	„ 1,00,415	„ 91,828	„ 1,14,282	„ 82,958
Imitation Linen Dhoties and Sarries	„ 27,023	„ 59,449	„ 21,735	„ 27,620	„ 33,713	„ 45,356	„ 67,209	„ 38,095	„ 36,769	„ 48,724
Embd. Muslins, Jacconets, and Scarfs (White) ...	„ 69,236	„ 1,33,276	„ 1,09,591	„ 1,35,715	„ 1,63,157	„ 1,54,620	„ 1,61,244	„ 2,10,796	„ 1,71,105	„ 2,43,064
39 in. × 12 yds. Nainsooks, Colored	„ 12,103	„ 11,367	„ 12,624	„ 1,872	„ 3,505	„ 3,797	„ 4,051	„ 5,639	„ 1,947	„ 5,786
Trouserings	„ 39,362	„ 54,533	„ 22,139	„ 33,667	„ 57,760	„ 23,628	„ 36,432	„ 39,734	„ 69,869	„ 88,065
Merced.-Tussore Suitings	„	„	„	„	„	„	„	„	„	„ 21,117
Harwards, Oxfords, Zephyrs, &c.	„ 42,614	„ 51,334	„ 17,420	„ 26,140	„ 42,801	„ 26,361	„ 29,856	„ 31,946	„ 57,360	„ 45,151
Satin	„ 30,607	„ 80,903	„ 61,496	„ 51,770	„ 52,277	„ 47,785	„ 94,929	„ 55,649	„ 93,068	„ 1,18,018
Coatings	„ 14,191	„ 32,341	„ 31,821	„ 43,586	„ 81,649	„ 34,901	„ 37,377	„ 30,144	„ 49,731	„ 68,500
Italians	„	„ 34,946	„ 8,353	„ 28,573	„ 60,656	„ 33,555	„ 73,866	„ 34,583	„ 41,792	„ 80,518
Dimities, Brocades or Brilliants	„ 30,923	„ 89,312	„ 60,143	„ 57,994	„ 87,796	„ 61,206	„ 1,66,181	„ 79,263	„ 94,500	„ 1,15,603
Total for 12 months ...	Pcs. 79,33,188	Pcs. 1,04,12,769	Pcs. 74,02,760	Pcs. 74,65,053	Pcs. 1,01,16,224	Pcs. 58,46,620	Pcs. 1,05,16,792	Pcs. 87,51,174	Pcs. 80,55,149	Pcs. 1,05,39,800
Flannels, cotton · Total for 12 months ...	yds. * ...	yds. * ...	yds. * ...	yds. * ...	yds. 83,39,803	yds. 39,35,533	yds. 42,52,682	yds. 27,09,853	yds. 36,72,982	yds. 44,26,832
Nets Do. ...	„ 12,64,368	„ 18,48,229	„ 11,26,765	„ 11,27,697	„ 23,76,906	„ 17,73,409	„ 10,87,700	„ 14,84,050	„ 22,95,218	„ 15,77,338
Handkerchiefs, White Do. ...	doz. 1,18,574	doz. 1,93,789	doz. 1,12,134	doz. 1,17,701	doz. 1,08,978	doz. 85,871	doz. 1,37,784	doz. 1,30,535	doz. 95,571	doz. 96,316
„ Printed Do. ...	„ 7,30,226	„ 6,46,876	„ 3,16,254	„ 2,37,241	„ 6,67,134	„ 1,78,687	„ 2,62,142	„ 2,42,087	„ 2,15,479	„ 4,04,468

* Not recorded.

Description of Goods.	From 1st Jan. to 31st Dec. 1895.	From 1st Jan. to 31st Dec. 1896.	From 1st Jan. to 31st Dec. 1897.	From 1st Jan. to 31st Dec. 1898.	From 1st Jan. to 31st Dec. 1899.	From 1st Jan. to 31st Dec. 1900.	From 1st Jan. to 31st Dec. 1901.	From 1st Jan. to 31st Dec. 1902.	From 1st Jan. to 31st Dec. 1903.	From 1st Jan. to 31st Dec. 1904.
YARNS.										
Grey Mule and Medio, 10/24's say 20's	lbs. 900	lbs. 20,140	lbs. 2,005	lbs. 1,709	lbs. 19,987	lbs. 15,664	lbs. ...	lbs. 620	lbs. 2,260	lbs. 50
" " 26/32's " 30's	" 7,33,400	" 7,67,318	" 10,77,722	" 19,21,416	" 17,03,508	" 6,82,505	" 8,17,599	" 7,20,761	" 97,918	" 2,03,211
" " 34/42's " 40's	" 13,65,527	" 17,54,984	" 12,11,967	" 14,02,827	" 18,86,137	" 3,97,230	" 9,05,630	" 8,30,974	" 8,49,787	" 6,77,714
" " 44/52's " 50's	" 6,59,523	" 8,14,011	" 4,95,792	" 3,20,475	" 4,93,046	" 2,44,513	" 4,12,505	" 3,32,799	" 3,18,385	" 3,08,656
" " 54/60's " 60's	" 2,83,903	" 5,80,556	" 3,59,817	" 2,06,502	" 3,00,510	" 6,34,411	" 3,22,639	" 2,09,438	" 2,00,731	" 2,13,588
" " " above 60's	" 50,002	" 1,26,751	" 1,34,088	" 1,43,613	" 1,29,261	" 2,28,727	" 1,61,932	" 2,02,568	" 1,57,066	" 2,84,787
Grey Water and Mock, 16/24's say 20's	" 6,000	" 9,000	" 6,550	" 3,000	" 3,600	" 8,100	" 4,500	" 12,900	" 15,500	" 3,600
" " 26/32's " 30's	" 33,36,916	" 34,53,975	" 38,70,442	" 40,04,735	" 29,88,843	" 16,90,962	" 20,68,073	" 12,57,392	" 11,12,458	" 12,44,232
" " " 40's	" 6,54,840	" 6,19,647	" 6,28,365	" 5,04,926	" 7,14,431	" 3,93,163	" 6,48,320	" 5,19,689	" 5,13,220	" 7,51,083
" " above 40's	" 8,308	" 33,100	" 26,763	" 6,600	" 27,758	" 63,027	" 23,056	" 25,600	" 11,700	" 14,005
Total for 12 months (Grey Yarns)... ...	lbs. 71,48,319	lbs. 81,79,482	lbs. 78,08,611	lbs. 85,15,803	lbs. 82,67,081	lbs. 40,58,302	lbs. 53,64,254	lbs. 41,62,741	lbs. 32,77,025	lbs. 37,00,926
Bleached ... ... Total for 12 months ...	lbs. 5,00,767	lbs. 5,78,983	lbs. 4,26,951	lbs. 4,76,771	lbs. 4,99,549	lbs. 4,61,112	lbs. 7,34,656	lbs. 6,63,204	lbs. 6,78,381	lbs. 8,16,168
Turkey Red	lbs. 17,12,417	lbs. 18,61,219	lbs. 9,83,052	lbs. 12,06,649	lbs. 12,45,092	lbs. 6,07,437	lbs. 11,62,693	lbs. 8,50,286	lbs. 8,57,607	lbs. 8,97,327
Orange and Yellow	" 7,52,471	" 6,38,261	" 5,06,761	" 4,25,306	" 3,50,680	" 2,33,904	" 4,00,375	" 3,42,601	" 3,14,790	" 3,08,285
Green	" 4,28,769	" 3,70,531	" 2,85,050	" 1,73,300	" 2,26,522	" 43,650	" 1,25,200	" 1,14,248	" 65,425	" 56,795
Other Colours and Mercerised	" 5,047	" 21,232	" 7,438	" 11,999	" 22,831	" 27,519	" 33,174	" 30,387	" 66,812	" 1,58,479
Total for 12 months (Coloured Yarns)...	lbs. 28,98,704	lbs. 28,86,243	lbs. 17,82,301	lbs. 18,17,254	lbs. 18,45,125	lbs. 9,12,510	lbs. 17,21,442	lbs. 13,37,422	lbs. 13,04,634	lbs. 14,20,886
Total all Yarns...	lbs. 1,05,47,790	lbs. 1,16,44,708	lbs1,00,17,863	lbs1,08,09,828	lbs1,06,11,755	lbs. 54,31,924	lbs. 78,20,352	lbs. 61,63,367	lbs. 52,60,040	lbs. 59,37,980
SUNDRY.										
Coals (from Europe and Australia). Total for 12 months...	Tons 5,75.249	Tons 4,10,722	Tons 1,26,698	Tons 1,97,942	Tons 3,11,632	Tons 58,631	Tons 83,824	Tons 1,81,641	Tons 1,24,723	Tons 1,67,590
Coke (from Europe). Do. ...	" 4,251	" 7,368	" 5,268	" 5,126	" 6,102	" 3,355	" 5,960	" 2,018	" 2,826	" 5,464
Coals (from Japan) Do. ...	" 4,547	" 57,677	" 24,545	" 16,817	" 75,387	" 23,936	" 56,565	" 7,421	" * 11,022	" 24,834
" (from Calcutta) Do. ...	" *	" 2,51,816	" 4,29,772	" 3,80,945	" 3,43,297	" 5,91,997	" 7,41,474	" 4,63,973	" * 6,60,654	" 5,93,484

* Not recorded.

EXPORTS OF INDIAN MANUFACTURED PIECE-GOODS AND YARNS,

BY STEAMERS, SHIPS, AND NATIVE CRAFT.

From 1*st January to* 31*st December* 1904.

As per Export General Manifests.

TO	Grey and White Piece-Goods.			Coloured Piece-Goods.		Total.		Twist.	
	Pckgs.	Yards.	lbs.	Pckgs.	Yards.	Pckgs.	Yards.	Bales.	Lbs.
BENGAL—Calcutta	16,968	2,56,95,801	67,11,797	4,410	61,24,384	21,378	3,18,20,185	29,827	1,17,16,450
BENGAL—Other Ports	2	1,400	500	3	1,880	5	3,280	...	.....
MADRAS	.....	.....	.....	...	...	...	.....	192	77,150
MALABAR AND COROMANDEL COASTS (Calicut, Cochin, Tellicherry, Cannanore, Mangalore, Tuticorin, Beypore, Cocanada, Vizagapatam, &c.)	632	11,12,539	3,39,648	618	15,77,954	1,250	26,90,493	11,073	38,20,933
SCIND (Kurrachee)	45,691	9,14,19,520	2,21,42,946	6,267	1,10,83,686	51,958	10,25,03,206	13,116	50,53,200
KUTCH AND KATTYAWAR	1,131	26,43,182	6,99,937	129	2,20,244	1,260	28,63,426	6,062	23,51,945
BRITISH CONCAN & GUZERAT (Rutnagherry, Carwar, Vingorla, Compta, Hurnee, Caranja, Panwell, Malwan, Surat, Broach, &c.)	776	14,54,910	3,70,531	1,369	19,92,419	2,145	34,47,329	1,046	3,61,004
FOREIGN CONCAN (Jafferabad, Shreevurdhan, Rajpoori, Jambli, Coombharoo, &c.)	40	65,797	15,973	102	1,38,941	142	2,04,738	82	23,316
MARMAGOA, GOA, DAMAUN AND DIU	157	2,31,166	60,011	181	2,64,276	338	4,95,442	521	1,83,689
BRITISH BURMAH (Rangoon and Moulmein.)	2,758	41,00,442	13,06,634	2,625	38,36,793	5,383	79,37,235	13,384	47,91,890
CEYLON (Colombo and Galle)	56	1,17,145	51,420	179	5,83,257	235	7,00,402	43	15,700
CHINA (Hongkong)	42	70,605	17,505	3	5,250	45	75,855	2,00,238	8,00,78,400
CHINA (Shanghai)	2,375	27,22,170	7,16,961	...	...	2,375	27,22,170	2,60,078	10,40,31,200
CHINA (Hanoi, Tientsin, &c.)	.....	.....	.....	...	...	...	.....	...	.....
JAPAN (Yokohama and Kobe)	.....	.....	.....	...	...	...	.....	3	1,200
STRAITS SETTLEMENTS (Penang and Singapore.)	623	10,49,903	2,82,273	1,214	18,97,562	1,837	29,47,465	13,936	51,29,545
PERSIA (Bushire, Abbas, Mahmorah, &c.)	465	7,41,351	2,15,120	168	2,17,018	633	9,58,369	6,215	22,64,916
ARABIA (Muscat, Hoodeida, Jeddah, &c.)	1,098	16,04,332	4,63,992	557	9,00,871	1,655	25,05,203	1,638	5,88,230
TURKEY IN ASIA (Smyrna, Beyrout, Bagdad, Bussorah, &c.)	2,921	57,59,325	15,09,654	515	10,70,170	3,436	68,29,495	9,225	36,62,595
MEKRAN AND SONMIANI (Vermalla, Gwadhur, &c.)	22	35,360	9,530	...	...	22	35,360	9	2,450
ADEN	8,803	1,00,52,949	27,74,178	1,920	28,21,881	10,723	1,28,74,830	3,711	14,31,760
AFRICA (Mauritius and Sychelles)	392	6,82,680	1,94,150	207	3,35,168	599	10,17,848	1	400
AFRICA (Zanzibar)	8,167	86,85,060	22,51,715	1,926	21,59,018	10,093	1,08,54,068	365	1,17,048
AFRICA (Mozambique)	3,544	42,68,716	8,74,041	412	5,53,870	3,956	47,62,586	2	400
ABYSSINIA (Massowa)	4,483	50,74,257	11,58,624	472	6,53,992	4,955	57,28,249	459	1,78,800
AFRICA (Suakim)	805	10,87,040	2,85,722	108	1,87,433	913	12,74,473	...	.....
AFRICA (Egypt)	.....	.....	.....	...	...	...	..	4,899	19,58,900
AFRICA (Natal)	1,317	16,42,999	3,00,736	414	4,87,525	1,731	21,30,524	...	.....
AFRICA (Hullulla, Beira, &c.)	51	66,140	15,426	7	4,430	58	70,570	14	5,600
AFRICA (Madagascar)	2	3,200	832	...	...	2	3,200	5	2,800
SUMATRA (Padang)	.....	.....	.....	...	...	...	.....	15	6,000
JAVA (Batavia, Cheribon, &c.)	20	34,300	5,761	1	568	21	34,868	988	2,50,505
SIAM (Bangkok)	207	3,93,322	95,558	493	7,23,861	700	11,17,183	359	1,02,200
LACADIVES AND MALDIVES	12	25,561	9,183	...	...	12	25,561	9	2,920
EAST INDIAN & PHILIPPINE ISLANDS. (Manila, Maccasar, &c.)	.....	.....	.....	...	...	...	.....	314	77,800
EUROPE	17	26,092	8,458	24	20,031	41	46,123	1,655	6,60,364
TURKEY IN EUROPE	106	1,19,770	30,728	...	...	106	1,19,770	1,333	5,31,400
AUSTRALIA	45	88,840	21,715	4	2,100	49	90,940	...	.....
AMERICA	2	1,358	400	...	...	2	1,358	...	.....
Total Exports from 1st January to 31st December 1904	1,03,730	17,10,27,232	4,29,41,062	24,328	3,78,61,072	1,28,058	20,88,91,304	5,80,847	22,94,80,205
Exported same time 1903	86,838	14,30,54,079	3,47,98,444	20,340	3,24,36,591	1,07,178	17,54,90,600	7,95,338	28,69,20,097
Do. do. 1902	89,216	14,12,52,169	3,49,07,543	15,944	2,46,06,384	1,05,160	16,58,58,553	6,74,450	26,66,98,930
Do. do. 1901	84,525	13,63,90,064	3,35,85,159	12,623	1,99,63,669	97,148	15,62,63,733	6,42,032	25,48,17,562
Do. do. 1900	74,415	11,69,55,481	2,81,68,912	9,516	1,56,02,237	83,931	13,25,57,718	5,46,503	18,65,71,588
Do. do. 1899	81,238	12,28,07,108	2,98,19,677	8,513	1,28,42,538	92,751	13,56,49,646	6,81,039	26,95,59,281
Do. do. 1898	69,026	9,92,68,706	2,47,63,678	6,177	90,72,326	75,203	10,83,41,032	5,58,681	21,87,21,607
Do. do. 1897	69,718	10,11,96,083	2,51,62,666	5,619	84,22,451	75,337	10,95,48,531	4,61,260	18,11,84,851
Do. do. 1896	87,364	12,29,74,132	3,15,20,976	6,411	98,54,183	93,775	13,28,28,315	5,84,599	22,97,46,959
Do. do. 1895	92,353	12,84,63,625	3,17,23,691	5,726	88,09,449	98,079	13,72,73,074	4,96,421	19,26,02,168

EXPORTS OF EUROPE MANUFACTURED PIECE-GOODS, AND YARNS, BY STEAMERS, SHIPS, AND NATIVE CRAFT.

From 1st January to 31st December 1904.

As per Export General Manifests.

TO	Piece-Goods.								Total.		Twist.	
	Grey.		White.		Colored and Printed.		Country Dyed.					
	Pckgs.	Yards.	Pckgs.	Yards.	Pckgs.	Yards.	Pckgs.	Yards.	Pckgs.	Yards.	Pckgs.	Lbs.
Bengal Calcutta	300	5,89,245	103	1,70,189	95	2,23,966	...	.....	498	9,83,400	50	18,700
Bengal—Other Ports	2	3,030	3	1,660	4	7,252	...	.....	9	11,942	...	.....
Madras	...	.....	...	.....	6	19,340	...	.....	6	19,340	...	.....
Malabar and Coromandel Coasts (Calicut, Cochin, Tellicherry, Cannanore, Mangalore, Tuticorin, Beypore, Cocanada, Vizagapatam, &c.)	6,536	1,46,41,792	2,236	59,01,164	842	22,64,555	1	675	9,615	2,28,08,186	225	68,475
Scind (Kurrachee)	7,245	1,56,04,702	16,321	4,46,09,899	5,533	1,48,24,018	14	15,600	29,113	7,50,54,219	327	1,03,960
Kutch and Kattyawar	4,511	1,27,60,728	1,119	31,45,094	2,061	54,55,312	30	23,480	7,721	2,13,84,684	95	26,545
British Concan & Guzerat (Rutnagherry, Carwar, Vingorla, Compta, Hurnee, Caranja, Panwell, Malwan, Surat, Broach, &c.)	1,224	24,07,562	100	1,74,295	515	10,21,409	2	550	1,841	36,03,816	251	70,678
Foreign Concan (Jafferabad, Shreevurdhan, Rajpoori, Jambli, Coombharoo, &c.)	26	68,997	13	10,221	13	25,385	...	475	52	1,05,078	6	1,805
Marmagoa, Goa, Damaun, and Diu	278	5,40,080	51	1,12,274	449	8,26,601	146	1,69,700	924	16,48,655	278	80,990
British Burmah (Rangoon and Moulmein.)	1,469	21,77,459	591	14,16,326	714	16,10,948	56	1,21,228	2,830	53,25,961	...	.....
Ceylon (Colombo and Galle.)	348	5,44,535	317	11,27,145	347	8,22,684	34	74,050	1,046	25,68,414	32	9,270
China (Hongkong)	251	1,50,600	73	1,54,896	243	3,20 699	...	.....	567	6,26,195	...	.....
China (Shanghai)	6	12,480	1	840	6	8,009	...	.....	13	21,329	...	.....
China (Hanoi, Amoy, Tientsin, &c.)	...	.....	...	.....	3	2,942	...	.....	3	2,942	...	.....
Japan (Yokohama and Kobe.)	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....
Straits Settlements (Penang and Singapore.)	16	36,298	341	9,28,726	275	6,82,488	1,389	26,16,458	2,021	42,63,970	...	.....
Persia (Bushire, Abbas, Mahmorah, &c.)	1,737	38,34,417	809	17,66,556	1,115	22,08,109	6,024	81,37,793	9,685	1,59,46,875	2,839	8,14,315
Arabia (Muscat, Hoodeida, Jeddah, &c.)	456	9,63,805	918	23,67,094	894	23,37,172	2,964	78,94,895	5,232	1,35,62,966	123	39,160
Turkey in Asia (Smyrna, Beyrout, Bagdad, Bussorah, &c.)	203	4,44,205	60	1,70,224	135	2,53,007	2,280	21,19,182	2,678	29,86,618	69	21,480
Mekran and Sonmiani (Vermalla, Gwadhur, &c.)	2	3,000	...	800	5	4,225	...	.....	7	8,025	1	800
Aden	238	5,01,787	541	15,16,671	445	11,46,267	719	20,86,819	1,943	52,51,544	190	58,490
Africa (Mauritius, &c.)	320	6,14,717	151	2,89,810	268	6,84,236	53	89,281	792	16,78,044	...	.....
Africa (Madagascar)	...	.....	...	.....	...	.....	1	1,925	1	1,925	...	.....
Africa (Zanzibar)	194	5,06,090	466	10,65,823	574	10,46,943	2,237	27,38,644	3,471	53,56,500	31	10,170
Africa (Mozambique)	104	2,04,507	113	1,78,083	279	7,69,519	1,145	12,89,297	1,641	24,41,406	...	.....
Abyssinia (Massowa)	34	66,789	48	1,65,244	48	1,24,524	21	76,152	151	4,32,709	1	300
Africa (Suakim)	62	1,12,321	18	37,030	5	7,900	20	42,900	105	2,00,151	...	.....
Africa (Egypt)	...	.....	2	1,600	...	.....	4	8,000	6	9,600	...	.....
Africa (Natal)	44	92,955	35	65,321	148	2,98,023	86	94,195	313	5,50,494	...	.....
Africa (Hullulla, Beira, &c.)	4	9,550	22	32,459	13	20,247	30	37,545	69	99,801	...	.....
Siam (Bangkok)	23	49,536	142	3,66,747	112	2,93,182	179	3,81,829	456	10,91,294	...	.....
East Indian and Philippine Islands (Manila, Maccasar, &c.)	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....
Sumatra (Padang)	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....
Java (Batavia, Cheribon, &c.)	...	.....	...	.....	3	6,316	...	.....	3	6,316	...	.....
Australia (Melbourne, Sydney, &c.)	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....
Europe	...	.....	2	2,990	10	22,939	...	.....	12	25,929	...	.....
Batoum	...	.....	26	67,800	...	2,400	...	.....	26	70,200	...	.....
Borneo	...	.....	...	.....	...	.....	...	.....	..	.....	...	.....
America	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....
Laccadives and Maldives.	2	3,850	19	39,149	6	17,403	2	4,000	29	64,402	4	1,200
Total Exports from 1st January to 31st December 1904	25,635	5,69,45,107	24,641	6,58,86,130	15,166	3,78,57,020	17,437	2,80,24,673	82,879	18,82,12,930	4,522	13,25,248
Exported same time 1903	27,349	5,82,82,723	23,371	6,12,45,692	14,660	3,57,63,284	17,746	3,01,76,526	83,126	18,54,68,035	4,680	13,78,823
Do. do. 1902	26,314	5,51,38,594	19,757	5,16,64,073	13,088	3,12,00,130	15,619	2,68,46,441	74,778	16,48,49,238	8,182	23,94,416
Do. do. 1901	28,462	5,85,51,551	22,230	5,93,59,905	13,410	3,29,84,648	21,146	3,22,90,294	85,248	18,31,86,393	8,064	26,78,641
Do. do. 1900	27,683	5,53,43,428	19,580	5,13,63,885	13,872	3,31,94,103	17,215	2,74,64,428	78,100	16,73,65,889	9,757	28,84,984
Do. do. 1899	34,887	7,05,60,675	22,610	5,98,08,127	15,127	3,44,42,885	21,402	3,37,70,400	94,026	19,85,82,091	13,161	40,20,855
Do. do. 1898	31,802	6,55,18,568	21,705	5,67,77,832	12,197	2,96,36,138	20,081	3,28,21,190	85,785	18,42,53,728	6,923	21,22,131
Do. do. 1897	30,473	6,50,44,122	18,695	5,09,02,275	11,663	2,89,44,776	20,511	3,31,99,258	81,342	17,80,90,431	7,549	23,09,651
Do. do. 1896	31,144	6,86,89,759	20,842	5,68,80,781	16,268	4,21,98,286	19,888	3,42,23,239	88,137	20,19,94,015	8,991	27,64,643
Do. do. 1895	35,793	7,91,77,054	19,170	5,36,58,345	19,762	5,10,95,577	28,544	4,33,16,546	1,03,269	22,72,47,522	11,074	33,32,649

EXPORTS OF INDIAN MANUFACTURED PIECE-GOODS AND YARNS BY RAILWAYS.

From 1st January to 31st December 1904.

G. I. P. AND CONNECTED RAILWAYS.

TO	Country Piece-Goods. Bales.	Country Piece-Goods. Boxes.	Country Twist. Bales.	Remarks.
GREAT INDIAN PENINSULA RAILWAY.				
BOMBAY TO NASIK, EXCLUDING NASIK	6	...	...	
NASIK	...	...	8	
NASIK TO MANMAD	...	...	16	
MANMAD TO BHUSAVAL	6	...	8	
BHUSAVAL TO AKOLA, EXCLUDING AKOLA AND KHAMGAON	1	...	...	
AKOLA	17	...	3	
AKOLA TO BADNERA	...	...	...	
BADNERA TO WARDHA, EXCLUDING WARDHA	6	3	1	
WARDHA	...	...	...	
WARDHA TO NAGPUR, EXCLUDING NAGPUR	1	...	...	
NAGPUR	19	...	166	
BHUSAWAL TO KHANDWA, EXCLUDING KHANDWA	7	...	21	
KHANDWA	1	...	...	
KHANDWA TO ITARSI	8	...	3	
ITARSI TO GADARVADA	21	...	...	
GADARVADA TO JUBBULPORE, EXCLUDING JUBBULPORE	25	...	1	
JUBBULPORE	313	35	13	
G. I. P. RAILWAY.—BRANCH LINES.				
CHALISGAON-DHULIA LINE	3	...	18	
JALGAON—AMALNER do.	...	...	...	
JALAMB TO KHAMGAON	...	...	...	
BADNERA TO AMRAOTI	11	...	5	
WARDHA TO WARORA, EXCLUDING WARORA	...	...	8	
WARORA	1	...	6	
MOHPANI VIA GADARVADA	...	...	...	
DHOND-MANDMAD RAILWAY.				
MANMAD TO DHOND, EXCLUDING AHMEDNAGAR	2	...	9	
AHMEDNAGAR	1	...	12	
INDIAN MIDLAND RAILWAY via ITARSI.				
ITARSI TO BHOPAL INCLUSIVE	9	1	5	
BHOPAL TO UJJAIN SECTION AND VIA	...	...	...	
BHOPAL TO BINA	2	...	1	
BINA TO KATNI AND VIA	27	2	8	
BINA TO BARAN	10	...	4	
BINA TO JHANSI	7	2	8	
JHANSI TO CAWNPORE, EXCLUDING CAWNPORE	...	2	...	
CAWNPORE AND VIA	1,395	484	57	
STATIONS BETWEEN JHANSI AND MANIKPUR AND VIA	...	1	...	
JHANSI TO GWALIOR, EXCLUDING GWALIOR	...	...	...	
GWALIOR AND VIA GWALIOR	1	...	...	
GWALIOR TO AGRA, EXCLUDING AGRA	...	...	...	
AGRA AND VIA	46	14	...	
STATIONS BETWEEN AGRA AND ALIGARH	...	...	...	
ALIGARH	...	...	...	
ALIGARH TO SAHARANPUR VIA GHAZIABAD AND CHANDOUSI	4	6	...	
GHAZIABAD TO MORADABAD	50	1	...	
DELHI	1	12	...	
DELHI-KALKA RAILWAY	...	3	...	
STATIONS BETWEEN SAHARANPUR AND LAHORE, EXCLUDING AMRITSAR AND LAHORE	...	...	...	
AMRITSAR	...	...	...	
LAHORE	...	...	...	
STATIONS BEYOND LAHORE	...	1	...	
EAST INDIA RAILWAY via JUBBULPORE.				
JUBBULPORE TO KATNI	10	2		
KATNI TO MANIKPUR	314	7	...	
MANIKPUR TO ALLAHABAD	9	...	4	
STATIONS EAST OF ALLAHABAD, EXCLUDING CALCUTTA	86	25	...	
CALCUTTA	...	...	...	
STATIONS BETWEEN CAWNPORE AND ALLAHABAD	...	...	...	
ALLAHABAD	210	7	...	
STATIONS BETWEEN CAWNPORE AND LUCKNOW	37	2	...	
LUCKNOW	...	...	...	
STATIONS BEYOND LUCKNOW	...	...	...	
STATIONS BETWEEN CAWNPORE AND AGRA	...	...	...	
STATIONS BETWEEN AGRA AND HATHRAS	38	...	...	
HATHRAS	...	...	...	
STATIONS BETWEEN HATHRAS AND CAWNPORE-ACHNERA RAILWAY	...	...	...	
STATIONS BETWEEN HATHRAS AND MUTTRA	...	...	...	
MUTTRA	...	...	...	
STATIONS BETWEEN HATHRAS AND DELHI	...	...	...	
DELHI	...	...	...	
DELHI TO BHATINDA	...	...	...	
BHATINDA TO LAHORE AND BEYOND	...	...	...	
CARRIED FORWARD	2,705	610	385	

G. I. P. AND CONNECTED RAILWAYS—*continued.*

TO	Country Piece-Goods.		Country Twist.	Remarks.
	Bales.	Boxes.	Bales.	
Brought forward	2,705	610	385	
BENGAL-NAGPUR RAILWAY.				
NAGPUR TO RAIPUR, EXCLUDING RAIPUR	7	12	51	
RAIPUR	7	.....	16	
RAIPUR TO BILASPUR...	1	.....	.....	
STATIONS EAST OF BILASPUR	895	81	548	
BILASPUR TO KATNI, EXCLUDING KATNI	.....	.....	4	
KATNI AND VIA	.....	.....	.....	
HYDERABAD-GODAVARY VALLEY RY.				
MANMAD TO SECUNDERABAD AND VIA, EXCLUDING AURANGABAD AND JALNA	12	1	6	
AURANGABAD	5	2	.....	
JALNA	3	.....	.....	
STATIONS ON RAJPUTANA-MALWA RAILWAY via KHANDWA	11	.....	7	
SOUTHERN SECTION.				
GREAT INDIAN PENINSULA RAILWAY.				
STATIONS BETWEEN KALYAN AND POONA	4	.....	.....	
POONA...	...	.....	.....	
POONA TO DHOND	6	.....	.....	
STATIONS BETWEEN DHOND AND BARSI ROAD	.....	.....	.....	
BARSI ROAD	1	.....	10	
BARSI ROAD TO HOTGI, EXCLUDING SHOLAPUR	6	.....	2	
SHOLAPUR	.....	.....	178	
HOTGI TO WADI	2	.....	7	
WADI TO RAICHUR	.....	.....	.....	
STATIONS ON BARSI LIGHT RAILWAY	.....	.....	14	
NIZAM'S RAILWAY.				
WADI TO BEGAMPAT	.....	.....	.....	
HYDERABAD	.....	.....	.....	
SECUNDERABAD	.....	.....	.....	
SECUNDERABAD TO WARANGAL	.....	.....	.....	
STATIONS BETWEEN WARANGAL AND BEZVADA	.....	.....	.....	
BEZVADA AND VIA	.....	.....	.....	
VIA SECUNDERABAD	.....	.....	.....	
MADRAS RAILWAY.				
RAICHUR TO GUNTAKAL	.....	.....	347	
STATIONS BETWEEN GUNTAKAL AND MADRAS	.....	.....	22	
MADRAS	163	125	411	
STATIONS EAST OF BANGALORE, EXCLUDING BANGALORE...	5	3	10	
SOUTHERN MAHARATTA RAILWAY.				
HOTGI TO BIJAPUR	3	.....	.....	
BIJAPUR TO BHAGALKOT	1	.....	.....	
BHAGALKOT TO GADAG	.....	.....	1	
POONA TO MIRAJ	53	1	2	
MIRAJ TO KOLHAPUR	70	3	26	
STATIONS BETWEEN MIRAJ AND BELGAUM	7	1	6	
BELGAUM	17	2	.....	
BELGAUM TO LONDA	2	.....	.....	
LONDA TO MARMAGAO...	.....	.....	.....	
STATIONS BETWEEN LONDA AND HUBLI	21	3	.....	
HUBLI	34	.....	2	
HUBLI TO BIRUR	58	.....	.....	
BIRUR TO SHIMOGA	1	.....	.....	
STATIONS BETWEEN BIRUR AND BANGALORE	7	1	.....	
BANGALORE...	739	16	4	
BANGALORE TO NANJANGUD	63	.....	.....	
STATIONS BETWEEN HUBLI AND GADAG	.....	.....	.....	
GADAG...	3	.....	5	
GADAG TO BELLARY	5	.....	.....	
BELLARY	6	.....	32	
BELLARY TO GUNTAKAL	.....	.....	.....	
GUNTAKAL TO BEZVADA AND BEYOND	.....	.....	14	
GUNTAKAL TO DHARMAVARAM	.....	.....	.....	
DHARMAVARAM TO BANGALORE	1	.....	.....	
STATIONS SOUTH-EAST OF DHARMAVARAM	.....	.....	.....	
TOTAL EXPORTS BY G. I. P. & CONNECTED RYS. IN 1904...	4,924	861	2,110	
Do. do. do. 1903...	2,541	451	3,021	

Bombay, Baroda & Central India Railway.

(INCLUDING RAJPUTANA-MALWA RAILWAY).

	TO	Country Pice-Goods. Bales.	Country Pice-Goods. Boxes.	Country Twist. Bales.	Remarks.
	B. B. & C. I. RAILWAY.				
	BOMBAY TO SURAT, EXCLUDING SURAT	1,169	151	697	
	SURAT	640	105	725	
	SURAT TO BROACH, EXCLUDING BROACH	97	1	81	
	BROACH	322	8	307	
	BROACH TO BARODA, EXCLUDING BARODA	142	6	16	
	BARODA	296	9	76	
	BARODA TO ANAND, EXCLUDING BARODA	66	1	37	
	ANAND TO GODHRA, EXCLUDING GODHRA	180	14	3	
	BARODA TO GODHRA, EXCLUDING BARODA AND GODHRA.	30	1	1	
	GODHRA	174	11	5	
	ANAND TO AHMEDABAD, EXCLUDING AHMEDABAD ...	210	10	48	
	AHMEDABAD	1,106	458	2,017	
	AHMEDABAD TO WADHWAN	136	2	20	
	BRANCH LINES.				
	TAPTI VALLEY RAILWAY	469	3	481	
	RAJPIPLA STATE RAILWAY	78	4	22	
	GAEKWAR'S DABHOI RAILWAY	231	23	439	
	PETLAD-CAMBAY RAILWAY	191	44	81	
	AHMEDABAD-PRANTIJ RAILWAY	51	...	25	
	AHMEDABAD-DHOLKA RAILWAY	4	4	...	
	RAJPUTANA-MALWA RAILWAY.				
VIA GODHRA.	GODHRA TO RUTLAM	330	15	76	
	RUTLAM TO UJJAIN	468	10	150	
	VIA UJJAIN (I. M. RY.)	69	4	6	
	RUTLAM TO KHANDWA	825	98	150	
	RUTLAM TO CHITORGARH	954	10	395	
	VIA CHITORGARH (U.-C. RY.)	291	34	3	
	CHITORGARH TO AJMER, EXCLUDING AJMER... ...	346	4	11	
	AJMER	...	...	...	
VIA SABARMATI.	AHMEDABAD TO MARWAR RY. JUNCTION	334	48	599	
	MARWAR RY. JUNCTION TO AJMER...	661	110	31	
	AJMER TO PHULERA	55	...	2	
	PHULERA TO KUCHAMAN ROAD	77	1	7	
	PHULERA TO JEYPUR	629	61	3	
	JEYPUR TO BANDIKUI	56	...	...	
	BANDIKUI TO ACHNERA...	43	...	...	
	ACHNERA TO AGRA, EXCLUDING AGRA	...	...	...	
	AGRA	234	161	17	
	ACHNERA TO CAWNPORE	3,549	378	373	
	BANDIKUI TO DELHI, EXCLUDING DELHI	214	24	...	
	DELHI	13,018	9,101	347	
	REWARI-BHATINDA-FAZILKA SECTION AND BEYOND.	2,698	618	32	
	VIA KALOL	12	5	47	
	„ MEHSANA	203	45	365	
	„ PALANPUR	72	14	34	
	„ MARWAR RAILWAY JUNCTION...	951	106	483	
	„ KUCHAMAN ROAD	167	7	25	
	„ AGRA	383	24	15	
	„ AGRA CANTONMENT...	...	...	...	
	„ HATHRAS ROAD	1	...	1	
	„ CAWNPORE	...	2	...	
	„ DELHI	421	54	1	
	VIA WADHWAN (B.-G.-J.-P. RY. & MORVI RY.)	345	52	47	
	TOTAL EXPORTS BY. B. B. & C. I. RY. IN 1904.	32,998	11,842	8,211	
	Do. do. 1903.	44,085	20,952	7,068	

SUMMARY OF EXPORTS BY ALL RAILWAYS.

TO	Country Piece-Goods.		Country Twist.	REMARKS.
	Bales.	Boxes.	Bales.	
G. I. P. AND CONNECTED RAILWAYS	4,924	861	2,110	
B. B. & C. I. RAILWAY (INCLUDING RAJPUTANA-MALWA RAILWAY).	32,998	11,842	8,211	
TOTAL EXPORTS BY ALL RYS. 1904 ...	37,922	12,703	10,321	
Do. do. 1903 ...	46,626	27,403	10,089	

ANNUAL PROGRESS OF RAILWAYS IN INDIA SINCE THEIR COMMENCEMENT.

Year.	Total Miles.	Year.	Total Miles.	Year.	Total Miles.	Year.	Total Miles.
1853	20	1866	3,563	1879	8,498	1892	17,894
1854	71	1867	3,929	1880	9,166	1893	18,510
1855	169	1868	4,008	1881	9,894	1894	18,906
1856	272	1869	4,255	1882	10,153	1895	19,555
1857	287	1870	4,771	1883	10,462	1896	20,262
1858	427	1871	5,074	1884	11,635	1897	21,123
1859	625	1872	5,369	1885	12,287	1898	22,048
1860	838	1873	5,697	1886	12,896	1899	23,528
1861	1,587	1874	6,226	1887	14,109	1900	24,760
1862	2,333	1875	6,543	1888	14,582	1901	25,373
1863	2,507	1876	6,862	1889	15,893	1902	25,931
1864	2,958	1877	7,322	1890	16,407	1903	26,956
1865	3,363	1878	8,223	1891	17,314	1904	27,565

Statement showing the Exports of Indian Manufactured Piece-Goods and Yarns by Sea and Rail during the years 1895 *to* 1904.

Year.	Piece-Goods		Total.	Yarns				Total.		Remarks.
	By Sea.	By Rail.		By Sea.		By Rail.				
	Packages.	Packages.	Packages.	Packages.	lbs.	Packages.	lbs.	Packages.	lbs.	
1895	98,079	50,365	1,48,644	4,96,121	19,26,02,163	12,421	29,77,128	5,08,842	19,55,79,291	
1896	93,775	38,908	1,32,683	5,84,599	22,93,46,959	8,752	25,09,864	5,93,351	23,18,56,823	
1897	75,337	43,565	1,18,902	4,61,260	18,11,84,351	10,239	23,28,928	4,71,499	18,35,13,279	
1898	75,203	46,756	1,21,959	5,53,681	21,87,24,607	11,795	28,40,139	5,65,476	22,15,64,746	
1899	92,751	47,402	1,40,153	6,81,039	26,95,59,281	5,959	17,63,630	6,86,998	27,13,22,911	
1900	83,931	46,526	1,30,457	3,46,503	13,65,71,588	6,599	21,93,174	3,53,102	13,87,63,762	
1901	97,148	90,464	1,87,552	6,42,032	25,43,17,562	8,105	26,68,361	6,50,137	25,69,85,923	
1902	1,05,160	78,924	1,84,084	6,74,450	26,66,98,930	8,850	29,70,596	6,83,300	26,96,69,526	
1903	1,07,178	74,029	1,81,207	7,25,338	28,63,20,007	10,089	33,39,154	7,35,427	29,02,59,161	
1904	1,28,058	50,625	1,78,683	5,80,847	22,94,80,205	10,321	39,15,520	5,91,168	23,33,95,725	

Statement showing the arrivals of Cotton into Bombay by Sea and Rail during the years 1895 *to* 1904.

By	1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	1904.
	Cwts.	Cwts.	Cwts.	Cwts.	Cwts.	Cwts.	Cwts.	Cwts.	Cwts.	Cwts.
Steamers and Country Craft	16,32,228	15,05,213	8,68,732	9,45,430	14,24,785	5,58,829	5,48,171	7,13,185	11,51,650	13,77,026
B. B. & C. I. Railway	19,17,601	21,18,116	17,94,956	16,94,377	18,59,612	6,78,406	13,46,872	16,50,540	21,03,109	18,75,122
G. I. P. Railway	31,55,920	31,96,394	24,61,585	40,12,843	39,59,682	18,60,160	53,21,171	48,64,101	55,38,328	47,06,884
Total Cwts...	67,05,749	68,19,723	51,25,273	66,52,650	72,44,079	30,97,395	72,16,214	72,27,826	87,96,587	79,59,032
Total F.-P. Bales of 3½ Cwts. each...	19,15,929	19,48,491	14,64,375	19,00,766	20,69,734	8,84,977	20,61,775	20,65,091	25,13,310	22,74,009

Statement showing the Exports of Cotton to Europe, China, Japan, Calcutta, &c., from Bombay during the years 1895 *to* 1904.

To	1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	1904.
	F. P. Bales.	F. P. Bales.	F. P. Bales.	F. P. Bales.	F. P. Bales.	F. P. Bales.	F. P. Bales.	F. P. Bales.	F. P. Bales.	F. P. Bales.
Europe	6,24,465	7,72,258	5,11,899	4,90,544	5,00,232	2,32,425	5,60,434	5,77,929	9,58,199	9,25,995
China	4,902	32,347	29,261	24,532	68,131	15,570	59,214	59,934	30,812	32,050
Japan	1,39,031	2,79,277	3,78,106	4,40,735	4,88,985	1,61,124	4,77,015	4,41,753	5,23,809	2,88,946
Calcutta and other Ports	40,951	43,285	40,997	35,730	14,446	16,337	17,668	12,063	13,988	14,997
Total Bales...	8,09,349	11,27,167	9,60,263	9,91,541	10,71,794	4,25,456	11,44,361	10,91,679	15,26,808	12,61,988

EXPORTS OF BOMBAY MANUFACTURED PIECE-GOODS AND YARNS FROM BOMBAY PORT ONLY.

(From Official Returns.) 1903-04. *(Year ending 31st March 1904.)*

EXPORTED TO	LENGTH AND WEIGHT.							VALUE.					
	Piece-Goods. Millions of [0000's omitted.]		Yarns.	Percentage of		Total Weight.		Lakhs of Rupees. (000's omitted.)		Percentage of		Total Value Lakhs of Rupees.	Percentage.
				Goods.	Yarns.	Millions of lbs. [0000's omitted.]	Percentage.			Goods.	Yarns.		
	Yards.	lbs.	lbs.	%	%		%	Goods.	Yarns.	%	%	[000's omitted.]	%
Foreign Ports	52·26	*13·06	236·19	18·14	87·77	249·25	73·08	† 74·11	829·97	19·54	86·77	‡904·08	67·68
Indian Ports	117·51	*29·38	27·86	40·82	10·35	57·24	16·78	(a) 158·37	102·88	41·75	10·76	(b) 261·25	19·56
Interior by Rail	118·15	29·54	5·04	41·04	1·88	34·58	10·14	146·88	23·65	38·71	2·47	170·53	12·76
Total Indian...	235·66	58·92	32·90	81·86	12·23	91·82	26·92	305·25	126·53	80·46	13·23	431·78	32·32
GRAND TOTAL...	287·92	71·98	269·09	100·00	100·00	341·07	100·00	379·36	956·50	100·00	100·00	1,335·86	100·00

* Assuming 4 yards to be the equivalent of 1 lb. and *vice versa* (reduced from 4·33 yds., the basis in years previous to 1895-96).

† Piece-Goods only: value *including all other sorts* (Handkerchiefs, Hosiery, &c., &c.) 79·10 lakhs; or

‡ Inclusive of Yarns 9C9·07 lakhs of Rupees.

(*a*) Piece-Goods only: value *including all other sorts* (Handkerchiefs, Shawls, &c., &c.) 166·37 lakhs, or

(*b*) Inclusive of Yarns 269·26 lakhs of Rupees.

1902-1903.

Foreign Ports	44·86	*11·22	228·45	15·53	85·30	239·67	70·47	†61·13	787·90	16·35	84·79	‡849·03	65·16
Indian Ports	119·10	*29·78	35·23	41·22	13·15	65·01	19·12	160·46	127·03	42·93	13·67	287·49	22·06
Interior by Rail	*125·00	31·25	4·15	43·25	1·55	35·40	10·41	152·21	14·28	40·72	1·54	166·49	12·78
Total Indian...	244·10	61·03	39·38	84·47	14·70	100·41	29·53	312·67	141·31	83·65	15·21	453·98	34·84
GRAND TOTAL...	288·96	72·25	267·83	100·00	100·00	340·08	100·00	373·80	929·21	100·00	100·00	1303·01	100·00

* Assuming 4 yards to be equivalent to 1 lb. and *vice versa* (reduced from 4·33 yards, the basis in years previous to 1895-96).

† Piece-Goods only: value *including all other sorts* (Handkerchiefs, Hosiery, &c., &c.) 66·16 lakhs; or

‡ Inclusive of Yarns 854·02 lakhs of Rupees.

1901-1902.

Foreign Ports	44·08	*11·02	246·58	13·88	87·96	257·60	71·60	†62·22	844·54	15·44	87·27	‡906·76	66·16
Indian Ports	137·77	*31·94	29·41	40·22	10·49	61·35	17·05	163·43	108·12	40·57	11·17	271·55	19·81
Interior by Rail	*145·81	36·45	4·36	45·90	1·55	40·81	11·35	177·20	15·08	43·99	1·56	193·28	14·03
Total Indian...	273·58	68·39	33·77	86·12	12·04	102·16	28·40	340·63	123·20	84·56	12·73	463·83	33·84
GRAND TOTAL...	317·66	79·41	280·35	100·00	100·00	359·76	100·00	402·85	967·74	100·00	100·00	1,370·59	100·00

* Assuming 4 yards to be equivalent to 1 lb. and *vice versa* (reduced from 4·33 yards, the basis in years previous to 1895-96).

† Piece-Goods only: value *including all other sorts* (Handkerchiefs, Hosiery, &c., &c.) 66·76 lakhs; or

‡ Inclusive of Yarns 911·80 lakhs of Rupees.

FOREIGN COUNTRIES TO WHICH GREY COTTON PIECE-GOODS OF BOMBAY MANUFACTURE HAVE BEEN EXPORTED SINCE 1897-98.

(From Government Returns.) *(Years ending 31st March.)*

Description.	To	In Millions of Yards (0000's omitted.)						
		1903-04.	1902-03.	1901-02.	1900-1901.	1899-1900.	1898-99.	1897-98.
T-Cloths	Mozambique	1·20	2·42	1·76	2·34	4·11	3·71	3·72
	Zanzibar	4·19	4·13	3·79	2·43	4·42	5·65	6·39
	Aden	·71	·43	1·47	·45	2·24	2·05	2·53
	China (Hongkong)	·06	...	.....	·14	·07	·29	·27
	Do. (Treaty Ports*)	·07	·18	·19	·23	1·56	1·02	1·34
	Mekran and Sonmiani	·09	·10	·14	·15	·15	·21	·24
	Abyssinia	1·01	·87	·97	2·36	1·80	1·35	·09
	Other Countries	2·04	1·74	1·53	1·43	2·92	2·44	3·05
	Total	9·37	9·87	9·85	9·53	17·27	16·72	17·63
Sheetings	Abyssinia	.....	...	.....	·03	·01	·03	·10
	Mozambique	.....	·05	·01	·01	·03	·06	·75
	Zanzibar	·14	·06	·05	·14	1·61	3·25	3·07
	Aden	·32	·08	·25	·09	·13	·23	·45
	Arabia	·03	·02	·16	·05	·17	·36	·64
	China (Treaty Ports*)	.....	...	.....	·08	·11	·03	.....
	Other Countries	.....	·41	·38	·54	·19	·20	·39
	Total	·49	·62	·85	·94	2·25	4·16	5·40
Domestics	Aden	3·28	2·95	3·22	2·02	2·89	3·60	4·96
	Arabia	·15	·02	·09	·08	·12	·11	·11
	Other Countries	·49	·27	·26	·43	·38	·14	·25
	Total	3·92	3·24	3·57	2·53	3·39	3·85	5·32
Drills and Jeans	Zanzibar	.....	...	.....	...	.....	.....	.....
	Aden	·01	·01	·03	...	·29	.....	·02
	Other Countries	.....	·01	·02	·08	·09	·02	.....
	Total	·01	·02	·05	·08	·38	·02	·02
Long Cloths	Abyssinia	1·47	1·27	·71	1·93	·53	1·37	·03
	Mozambique	4·76	6·40	2·54	2·15	1·03	·88	·60
	Zanzibar	1·45	1·40	2·61	·60	·86	·23	·41
	Aden	4·59	2·54	4·51	2·68	3·83	3·55	5·07
	China (Treaty Ports*)	.....	·21	·03	·16	1·60	·26	·08
	Arabia	·29	·09	·43	·16	·49	·14	·44
	Persia	·14	·09	·23	·32	·05	·40	·51
	Straits	·13	·05	·04	·29	·18	·10	·05
	Turkey in Asia	1·57	·96	2·84	1·36	1·89	1·45	1·31
	Egypt	·59	·93	·37	·69	·67	·71	·17
	Other Countries	·09	·03	·08	·09	·62	·45	·22
	Total	15·08	13·97	14·39	10·43	11·75	9·55	8·89
Chudders	Aden	·52	·36	·44	·40	·64	·62	·46
	Zanzibar	2·66	2·51	2·39	1·90	1·49	1·62	1·89
	Other Countries	2·72	2·36	1·22	1·29	1·29	1·18	1·04
	Total	5·90	5·23	4·05	3·59	3·42	3·42	3·39
Dhooties	Aden	·14	·14	·14	·02	·02	·04	·02
	Other Countries	·35	·22	·15	·22	·14	·22	·12
	Total	·49	·36	·29	·24	·16	·26	·14
Other Sorts	Total	5·10	2·40	1·95	3·96	4·45	1·67	·52
	Grand Total	40·36	35·71	35·00	31·30	43·07	39·65	41·31

* Almost entirely to Shanghai.

DESCRIPTIONS OF GREY COTTON PIECE-GOODS OF BOMBAY MANUFACTURE EXPORTED TO FOREIGN PORTS SINCE 1896-97.

(*From Government Returns.*) (*Years ending 31st March.*)

Description.	In Millions of Yards (0000's omitted).							
	1903-04.	1902-03.	1901-02.	1900-1901.	1899-1900.	1898-99.	1897-98.	1896-97.
T-Cloths	9·37	9·87	9·85	9·53	17·27	16·72	17·63	22·11
Sheetings	·49	·62	·85	·94	2·25	4·16	5·40	8·02
Domestics	3·92	3·24	3·57	2·53	3·39	3·85	5·32	5·87
Drills and Jeans	·01	·02	·05	·08	·38	·02	·02	·10
Long Cloths	15·08	13·97	14·39	10·43	11·75	9·55	8·89	10·60
Chudders	5·90	5·23	4·05	3·59	3·42	3·42	3·39	3·51
Dhooties	·49	·36	·29	·24	·16	·26	·14	·12
Other sorts	5·10	2·40	1·95	3·96	4·45	1·67	·52	·21
Total Millions of Yards...	40·36	35·71	35·00	31·30	43·07	39·65	41·31	50·54
Total Lakhs of Rupees...	51·09	44·02	45·06	38·97	52·36	47·11	49·22	61·16

EXPORTS OF BOMBAY SPUN TWIST BY SEA AND RAIL. REDUCED TO BALES OF 400 lbs. EACH.

January 1st to December 31st.	To China.	To Japan.	Total to China and Japan.	Total to other Ports.	Total Exports by Sea.	Total Exports by Rail.	Total Exports by Sea and Rail.
1880	63,194	4,527	67,721	38,825	106,546	14,092	120,638
1881	61,783	7,378	69,161	41,092	110,253	14,333	124,586
1882	81,434	9,854	91,288	41,502	132,790	14,400	147,190
1883	94,982	17,421	112,403	42,130	154,533	9,091	163,624
1884	127,318	13,846	141,164	43,226	189,390	6,049	195,439
1885	154,517	19,020	173,537	43,197	216,734	5,129	221,863
1886	199,407	20,543	219,950	45,103	265,053	4,649	269,702
1887	205,158	39,730	244,888	47,799	292,687	3,451	296,138
1888	234,071	52,697	286,768	49,789	336,557	2,250	338,807
1889	254,697	62,220	316,917	59,326	376,243	1,615	377,858
1890	325,060	37,722	362,782	67,201	429,983	13,942	443,925
1891	365,038	10,939	375,977	78,136	454,113	9,147	463,260
1892	385,771	21,445	407,216	69,547	476,763	7,850	484,613
1893	297,572	14,198	311,770	88,130	399,900	9,139	409,039
1894	338,703	10,743	349,446	105,863	455,309	10,388	465,697
1895	374,119	2,515	376,634	104,871	481,505	7,443	488,948
1896	471,023	2,467	473,490	99,877	573,367	6,274	579,641
1897	361,221	645	361,866	91,095	452,961	5,822	458,783
1898	437,645	475	438,120	108,691	546,811	7,125	553,936
1899	579,619	250	579,869	94,029	673,898	4,408	678,305
1900	253,331	100	253,431	87,998	341,429	5,480	346,909
1901	536,195	.....	536,195	99,599	635,794	6,876	642,670
1902	555,487	.....	555,487	111,259	666,746	7,427	674,173
1903	604,044	.....	604,044	113,256	717,300	8,348	725,648
1904	460,316	3	460,319	113,381	573,700	9,789	583,489

QUALITIES OF YARNS OF BOMBAY MANUFACTURE EXPORTED TO FOREIGN PORTS SINCE 1896-97.

(*From Government Returns.*) (*Years ending 31st March.*)

Description.	In Millions of lbs. (0000's omitted).							
	1903-04.	1902-03.	1901-02.	1900-01.	1899-1900.	1898-99.	1897-98.	1896-97.
Mule No. 15s and under	114·16	94·47	116·14	48·56	125·28	95·82	68·62	50·93
„ „ 16s to 24s	119·87	132·10	129·05	63·89	92·92	101·21	100·05	124·44
„ „ 25s to 32s	·59	·33	·29	·27	·16	·17	·13	·18
„ „ 33s to 44s	·29	·13	·04	·14	·03	...	...	·15
Total ...	234·91	227·03	245·52	112·86	218·39	197·20	168·80	175·70
Water No. 20s and under	...	...	...	...	...	...	·27	·07
„ „ 21s to 30s	...	...	...	...	...	...	...	...
„ „ 31s to 40s	...	...	...	...	...	...	...	...
Total ...	...	...	...	...	...	...	·27	·07
Colored Yarns ... ... Total ...	1·28	1·41	1·06	·97	1·07	·70	·99	·85
Total Yarns ...	236·19	228·44	246·58	113·83	219·46	197·90	170·06	176·62

FOREIGN COUNTRIES TO WHICH YARNS OF BOMBAY SPINNING HAVE BEEN EXPORTED SINCE 1896-97.

(*From Government Returns.*) (*Years ending 31st March.*)

Quality.	To	In Millions of lbs.							
		1903-04.	1902-03.	1901-02.	1900-01.	1899-1900.	1898-99.	1897-98.	1896-97.
Mule No. 15s and under.	Aden	·72	1·12	·76	·63	1·68	·98	1·24	·85
	Japan	...	...	...	...	·02	...	...	...
	China (Hongkong) ...	51·49	40·74	43·70	34·82	57·29	62·75	43·07	32·99
	China (Treaty Ports*)...	58·05	49·01	70·19	11·94	65·69	31·18	23·63	16·37
	Other Countries ...	3·90	3·60	1·49	1·17	·60	·91	·68	·72
	Total ...	114·16	94·47	116·14	48·56	125·28	95·82	68·62	50·93
16s to 24s	Aden	·63	·60	·67	·42	·51	·50	·58	·45
	Japan	...	...	...	...	·12	·04	·35	·64
	China (Hongkong) ...	54·65	56·47	53·17	34·17	35·70	49·86	47·74	59·41
	China (Treaty Port*) ...	57·13	67·87	68·87	23·86	52·98	44·40	46·06	59·44
	Straits	3·03	4·30	3·15	3·05	2·22	3·71	3·16	2·57
	Other Countries ...	4·43	2·86	3·19	2·39	1·39	2·71	2·16	1·93
	Total ...	119·87	132·10	129·05	63·89	92·92	101·22	100·05	124·44
Above 24s	Total ...	·88	·46	·33	·41	·19	·16	·14	·33
	Total Mule ...	234·91	227·03	245·52	112·86	218·39	197·20	168·81	175·70
Water.....	„ Water ...	...	...	...	...	...	...	·27	·07
Colored	„ Colored ...	1·28	1·41	1·06	·97	1·07	·70	·99	·85
	Grand Total ...	236·19	228·44	246·58	113·83	219·46	197·90	170·07	176·62
	Value in Lakhs of Rs...	829·97	787·89	844·54	401·22	625·46	590·69	591·78	648·92

* Almost entirely to Shanghai.

COTTON.

RECEIPTS at, and Exports from, Bombay Port, also Mill consumption in the Island of Bombay. In thousands of Bales (000's omitted).

Years ending 30th June.

Years ending 30th June.	Receipts.	Exports to			Mill consumption.	Total.	Years ending 30th June.	Receipts.	Exports to			Mill consumption	Total.
		Europe.	Elsewhere.	Total.					Europe.	Elsewhere.	Total.		
1859	.....	490	152	642									
1860	.....	566	202	768	Maxm. Exports up to this year.		1882	1,832	1,521	87	1,608	277	1,885
							1883	1,770	1,335	95	1,430	313	1,743
1861	.....	835	61	896	American War.		1884	1,759	1,295	100	1,395	348	1,743
1862	.....	911	8	919	In 1863 and 1864		1885	1,139	791	70	861	392	1,253
1863	.....	867	3	870	Bombay Imported Cotton from China.		1886	1,480	1,009	61	1,070	391	1,461
1864	.....	1,065	1	1,066			1887	1,703	1,147	40	1,187	454	1,641
1865	.....	1,187	14	1,201	42	1,243	1888	1,472	893	58	951	500	1,451
1866	.....	1,277	5	1,282	46	1,328	1889	1,851	1,286	46	1,332	565	1,897
1867	.....	1,030	48	1,078	47	1,125	1890	2,235	1,488	71	1,559	636	2,195
1868	.....	1,225	56	1,281	48	1,329	1891	2,020	1,070	107	1,177	762	1,939
1869	.....	1,115	50	1,165	49	1,214	1892	1,770	905	203	1,107	728	1,835
1870	.....	967	39	1,006	50	1,056	1893	1,738	816	169	985	724	1,709
1871	1,085	1,002	48	1,050	52	1,102	1894	1,769	908	159	1,067	731	1,798
1872	1,151	1,079	34	1,113	53	1,166	1895	1,540	525	143	668	815	1,483
1873	978	917	34	951	67	1,018	1896	2,151	800	346	1,146	849	1,995
1874	1,311	1,192	25	1,217	83	1,300	1897	1,612	603	405	1,008	703	1,711
1875	1,345	1,285	20	1,305	135	1,440	1898	1,730	424	409	833	817	1,650
1876	1,073	980	35	1,015	147	1,162	1899	2,033	578	520	1,098	951	2,049
1877	1,141	920	38	958	161	1,119	1900	988	117	444	561	745	1,306
1878	961	800	46	846	204	1,050	1901	1,896	620	340	960	696	1,656
1879	832	652	64	716	181	897	1902	2,142	525	732	1,257	987	2,244
1880	1,171	874	34	908	220	1,128	1903	2,454	921	349	1,270	986	2,256
1881	1,244	874	60	934	273	1,207	1904	2,151	1,036	423	1,459	973	2,432

STATISTICS OF COTTON SPINNING AND WEAVING IN THE INDIAN MILLS in the twelve months, April 1904 to March 1905, compared with the corresponding period of 1902-1903 and 1903-1904.

No. 1.—ABSTRACT STATEMENT of the QUANTITY (in pounds) of YARN Spun.

	Twelve months, April to March.		
	1902-03.	1903-04.	1904-05.
British India.			
Bombay	419,526,005	414,932,169	422,248,895
Madras	31,256,104	28,714,162	30,124,665
Bengal	47,085,551	46,487,245	38,347,577
United Provinces of Agra and Oudh (also Ajmer-Merwara)	27,050,371	29,930,262	27,348,938
Punjab	9,587,025	11,578,346	11,624,517
Central Provinces and Berar (*a*)	24,306,984	24,548,608	26,253,834
TOTAL ...	558,812,040	556,190,792	555,948,426
Foreign Territory.			
Berar (*a*) and the Native States of Indore, Mysore, Baroda, Nandgaon, Bhavnagar, Hyderabad (*b*), Wadhwan (*c*), Quilon (*d*), Kishengarh (*e*), and Ujjain (*f*).	16,882,220	22,568,283	22,432,849
GRAND TOTAL ...	575,694,260	578,759,075	578,381,275

(*a*) Berar ceased to be Foreign Territory from the 1st October 1902 when it was leased in perpetuity to British Government, but in this table the transfer has been made from the 1st October 1903 when the administration was transferred to the Central Provinces.

(*b*) From September 1902. | (*c*) From October 1902. | (*d*) From November 1902. | (*e*) From April 1903. | (*f*) From May 1903.

No. 2.—ABSTRACT STATEMENT of the QUANTITY of WOVEN GOODS produced.

[*N.B.*—The weight in pounds represents the weight of all woven goods ; the measure in yards represents the equivalent of the weight of grey goods.]

		Twelve months, April to March.		
		1902-03.	1903-04.	1904-05.
British India.				
Bombay	pounds.	100,465,618	112,717,110	130,998,292
	yards.	346,476,061	385,986,514	465,407,645
	dozens.	39,734	38,998	37,400
Madras	pounds.	4,995,069	5,343,576	6,578,847
	yards.	7,056,356	6,793,199	10,942,148
Bengal	pounds.	414,856	690,815	720,224
	yards.	1,341,214	2,562,559	2,608,820
United Provinces of Agra and Oudh (also Ajmer-Merwara)	pounds.	4,585,527	5,493,867	6,018,012
	yards.	16,161,442	19,666,625	22,630,193
Punjab	pounds.	177,510	64,927	149,773
	yards.	536,416	189,258	447,295
Central Provinces and Berar (*a*) ...	pounds.	6,646,052	7,565,932	8,276,682
	yards.	18,847,284	22,689,628	24,075,186
TOTAL ...	pounds.	117,284,632	131,876,227	152,741,830
	yards.	390,418,773	437,887,783	526,111,287
	dozens.	39,734	38,998	37,400
Foreign Territory.				
Berar (*a*), and the Native States of Indore, Mysore, Baroda, Nandgaon, Bhavnagar, Hyderabad (*b*), and Wadhwan (*c*) ...	pounds.	5,291,277	6,167,945	6,004,725
	yards.	22,056,692	22,656,490	21,601,694
GRAND TOTAL ...	pounds.	122,575,909	138,044,172	158,746,555
	yards.	412,475,465	460,544,273	547,712,981
	dozens.	39,734	38,998	37,400

(*a*) Berar has been transferred from the Foreign Territory with effect from the 1st October 1903, see note (*a*) to Abstract Statement No. 1.

(*b*) From September 1902. | (*c*) From October 1902.

No. 3.—DETAILED STATEMENT of the QUANTITY (in pounds) and the COUNTS (or numbers) of YARN Spun.

Count or Number.	Twelve Months, April to March.			Count or Number.	Twelve Months, April to March.		
	1902-03.	1903-04.	1904-05.		1902-03.	1903-04.	1904-05.
BOMBAY PRESIDENCY.				**BOMBAY ISLAND.**			
1	19,859	4,200	800	1	19,859	4,200	800
2	63,174	40,990	800	2	58,314	40,990	800
3	....	162,427	331,801	3	....	158,192	331,801
4	346,947	584,195	676,980	4	340,329	574,270	672,059
5	....	5,977	5,111	5	....	5,977	5,111
6	11,775,346	9,733,573	9,262,757	6	10,834,873	8,650,646	8,324,107
7	2,015,172	2,868,761	3,377,612	7	1,357,989	2,298,095	2,654,043
8	3,276,402	2,935,371	3,075,138	8	2,794,426	2,423,653	2,610,324
9	1,510,702	2,174,451	2,290,916	9	521,480	894,793	1,060,983
10	97,181,715	93,227,503	108,402,523	10	94,789,531	90,863,074	106,460,602
Total Nos. 1 to 10	116,189,317	111,737,948	127,424,438	Total Nos. 1 to 10	110,716,801	105,913,890	122,120,630
11	13,366,068	14,589,446	14,740,592	11	12,011,681	13,475,072	13,791,530
12	29,953,900	40,187,284	32,189,097	12	28,696,637	38,708,385	30,326,860
13	6,132,046	4,887,854	4,654,265	13	4,028,810	3,339,234	3,195,769
14	2,877,319	6,683,739	3,491,196	14	2,169 708	5,976,854	2,565,780
15	604,304	668,393	653,783	15	52,869	103,214	162,812
16	23,541,196	23,373,784	15,256,400	16	21,825,866	21,781,651	13,491,951
17	6,994,643	7,694,622	6,837,519	17	5,054,995	6,724,149	6,035,479
18	6,394,142	5,800,801	5,195,581	18	4,113,725	4,402,997	4,283,862
19	1,509,109	1,179,729	780,502	19	1,101,039	916,289	469,058
20	127,703,977	110,600,059	112,699,024	20	97,667,160	84,433,968	88,113,688
Total Nos. 11 to 20	219,076,704	215,665,711	196,508,359	Total Nos. 11 to 20	176,722,490	179,861,813	160,386,789
21	15,877,769	15,316,793	12,510,210	21	9,541,263	9,198,477	7,639,187
22	17,793,108	16,056,706	21,612,325	22	10,527,857	10,051,388	14,127,095
23	2,175,292	1,575,006	1,765,992	23	1,242,834	856,566	621,441
24	16,258,728	15,306,283	18,358,371	24	11,106,677	9,647,200	12,963,663
25	921,812	3,134,378	2,981,649	25	261,318	270,692	260,027
26	7,090,361	6,682,922	8,667,794	26	3,479,430	3,587,686	4,301,664
27	238,426	130,442	1,215,900	27	13,425	46,698	246,482
28	4,904,393	3,924,931	3,639,993	28	2,444,179	2,706,279	2,853,932
29	781	66,716	103,734	29	....	65,457	51,474
30	7,847,535	10,210,625	11,003,691	30	3,031,643	3,640,942	4,389,153
Total Nos. 21 to 30	73,108,205	72,404,802	81,859,659	Total Nos. 21 to 30	41,638,626	40,071,585	47,404,118
31	219,925	248,557	501,631	31	1,048	26,299	7,592
32	3,408,853	3,885,749	3,035,017	32	1,360,623	1,118,982	1,333,526
33	1,366,065	1,574,681	1,513,011	33	89,800	121,354	144,941
34	2,136,734	3,110,442	1,971,587	34	430,416	735,739	546,750
35	295,492	491,764	1,684,506	35	....	747	....
36	850,920	945,381	2,817,852	36	205,251	190,371	201,663
37	....	17,600	211,955	37	....	....	....
38	34,595	10,550	23,620	38	15,323	839	2,145
39	54,294	29,207	1,586	39	52,794	1,169	...
40	2,262,958	3,953,523	3,501,310	40	499,014	836,028	887,395
Total Nos. 31 to 40	10,629,836	14,207,544	15,262,075	Total Nos. 31 to 40	2,654,269	3,031,588	3,124,010
Above 40	521,943	956,164	1,194,364	Above 40	179,018	404,800	507,809
Total ..	419,526,005	414,932,169	422,248,895	Total ..	331,911,204	329,283,676	333,543,356

Note.—The suburb of Coorla in the Thana district is treated for statistical purposes as part of the Island of Bombay.

No. 3.—DETAILED STATEMENT of the QUANTITY (in pounds) and the COUNTS (or numbers) of YARN Spun—continued.

Count or Number.	Twelve Months, April to March.			Count or Number.	Twelve Months, April to March.		
	1902-03.	1903-04.	1904-05.		1902-03.	1903-04.	1904-05.
AHMEDABAD.				**MADRAS.**			
1	....	....	....	1	8,624	18,098	8,605
2	....	....	....	2	37,526	13,961	15,574
3	....	4,235	...	3	49	288	....
4	1,925	4,170	....	4	379,056	535,371	411,545
5	....	....	....	5	....	....	55,725
6	532,201	662,710	457,088	6	1,049,544	921,708	759,002
7	549,147	468,542	628,665	7	12,270	13,310	....
8	326,425	373,709	308,220	8	632,238	564,934	424,460
9	857,353	1,056,019	1,075,455	9	18,020	29,400	....
10	1,113,781	311,255	273,149	10	1,335,966	655,367	582,566
Total Nos. 1 to 10	3,380,832	2,880,640	2,742,577	Total Nos. 1 to 10	3,473,293	2,752,437	2,257,477
11	926,886	823,400	673,763	11	58,258	72,887	8,011
12	179,765	99,670	190,105	12	1,077,231	1,231,527	1,069,541
13	1,870,273	1,411,830	1,143,171	13	195,985	249,257	71,396
14	291,320	369,692	396,280	14	2,126,271	2,302,845	2,615,194
15	285,887	312,286	285,016	15	821,504	1,039,954	1,276,448
16	519,965	248,917	393,745	16	2,164,429	2,144,651	2,328,946
17	1,800,728	580,527	622,980	17	1,270,661	1,538,094	1,750,375
18	741,402	597,913	144,235	18	3,047,432	803,648	2,960,754
19	77,617	6,124	15,113	19	2,074,796	2,128,880	2,750,598
20	6,709,047	7,440,337	6,898,006	20	10,899,658	9,562,796	9,288,913
Total Nos. 11 to 20	13,402,890	11,920,696	10,762,434	Total Nos. 11 to 20	23,736,225	21,075,139	24,120,176
21	4,356,090	4,140,624	3,240,761	21	847,815	1,117,588	500,304
22	4,552,177	3,648,547	5,114,761	22	553,583	486,092	610,756
23	932,458	718,440	529,697	23	11,204	20,370	....
24	4,069,106	4,711,931	3,734,612	24	99,586	88,781	54,748
25	656,073	2,851,796	2,712,651	25	....	.....	....
26	3,046,417	2,545,535	3,916,553	26	472,882	567,769	739,640
27	218,283	82,585	967,670	27	....	....	.....
28	1,334,352	790,817	345,779	28	115,668	208,190	175,450
29	731	1,259	52,052	29	....	....	....
30	2,620,478	3,933,226	5,843,203	30	1,138,521	1,358,892	1,283,349
Total Nos. 21 to 30	22,386,165	23,424,760	24,457,739	Total Nos. 21 to 30	3,179,254	3,842,632	3,364,247
31	214,926	191,898	227,390	31	....	....	....
32	1,874,150	2,469,619	1,488,262	32	14,751	86,598	....
33	1,145,998	1,427,196	1,345,734	33	....	....	....
34	1,708,643	2,374,703	1,212,743	34	....	.....	....
35	207,908	441,269	1,566,328	35	....	....	....
36	644,133	755,010	2,616,189	36	....	....	....
37	1,536	17,600	211,955	37	....	....	....
38	19,272	9,731	21,475	38	....	....	....
39	1,500	28,128	1,586	39	....	....	....
40	1,212,448	2,026,929	2,011,777	40	791,481	947,043	382,765
Total Nos. 31 to 40	7,030,509	9,742,063	10,703,439	Total Nos. 31 to 40	806,232	1,033,636	382,765
Above 40	241,170	254,928	559,074	Above 40	61,100	10,318	.....
Total ..	46,441,566	48,223,087	49,225,263	Total ..	31,256,104	28,714,162	30,124,665

No. 3.—DETAILED STATEMENT of the QUANTITY (in pounds) and the COUNTS (or numbers) of YARN Spun—continued.

Count or Number.	Twelve Months, April to March.			Count or Number.	Twelve Months, April to March.		
	1902-1903.	1903-04.	1904-05.		1902-1903.	1903-04.	1904-05.
	BENGAL.				**UNITED PROVINCES OF AGRA & OUDH (ALSO AJMER-MERWARA).**		
1	5,389	4,660	8,515	1	....	....	....
2	330,556	322,883	202,177	2	....	9,724	86,838
3	6,787	6,554	....	3	....	48,157	238
4	171,225	80,740	59,135	4	523,259	696,365	627,262
5	1,327	1,201	....	5	4,229	....	25,858
6	756,166	1,013,720	864,384	6	5,393	24,797	118,255
7	381,920	340,651	360,927	7	104,696	166,914	155,334
8	941,519	1,041,344	560,168	8	193,080	129,283	226,058
9	168,204	35,415	86,772	9	813,879	798,586	193,657
10	16,537,350	17,056,913	13,048,930	10	4,622,138	5,038,513	4,634,835
Total Nos. 1 to 10	19,300,443	19,904,081	15,122,008	Total Nos. 1 to 10	6,266,674	6,912,339	6,068,095
11	2,685,112	2,612,929	1,755,648	11	2,409,400	3,336,093	2,322,899
12	4,919,791	6,156,446	4,145,054	12	2,547,882	3,278,321	2,226,451
13	1,280,032	1,387,414	1,328,338	13	2,934,767	3,235,577	2,044,006
14	2,125,380	2,620,236	2,388,812	14	1,703,934	2,312,946	2,686,196
15	805,259	739,896	537,629	15	3,340,225	2,172,373	2,410,006
16	5,502,035	4,800,918	4,226,129	16	4,141,310	3,736,440	3,755,407
17	1,167,023	618,500	917,415	17	425,033	2,116,889	1,125,937
18	2,788,778	1,475,614	1,527,537	18	1,888,393	997,327	1,463,666
19	395,796	1,085,494	919,041	19	87,290	811,935	1,135,645
20	3,790,882	2,370,537	2,582,784	20	958,974	640,164	1,456,699
Total Nos. 11 to 20	25,460,088	23,897,984	20,328,387	Total Nos. 11 to 20.	20,437,208	22,638,065	20,626,912
21	778,670	616,574	693,531	21	4,694	11,204	13,157
22	820,702	1,018,211	1,233,668	22	32,568	35,955	83,709
23	....	1,225	....	23	16,845	....	2,414
24	472,491	599,272	376,423	24	200,935	85,264	150,673
25	71,923	100,997	42,469	25	....	99,758	73,689
26	17,276	47,163	15,341	26	8,051	7,017	98,660
27	480	....	....	27	5,781	953	66,563
28	....	24,189	1,128	28	30,777	99,377	125,553
29	431	....	....	29	....	216	....
30	140,945	172,953	139,256	30	5,868	27,183	1,174
Total Nos. 21 to 30	2,302,918	2,580,584	2,501,811	Total Nos. 21 to 30	305,519	366,927	622,592
31	....	....	....	31	....	....	....
32	21,766	103,299	204,252	32	9,876	4,111	.....
33	....	....	8,250	33	....	535	1,451
34	....	....	46,369	34	2,644	208	25,709
35	....	....	....	35	....	....	....
36	....	....	....	36	426	2,681	70
37	....	....	....	37	....	....	....
38	....	....	....	38	....	....	....
39	....	....	....	39	....	....	....
40	336	1,297	108,041	40	9,638	....	4,109
Total Nos. 31 to 40	22,102	104,596	366,912	Total Nos. 31 to 40	22,584	7,535	31,339
Above 40	....	....	18,459	Above 40	18,386	5 396	....
Total ..	47,085,551	46,487,245	38,347,577	Total ..	27,050,371	29,930 262	27,348,938

No. 3.—DETAILED STATEMENT of the QUANTITY (in pounds) and the COUNTS (or numbers) of YARN Spun—continued.

Count or Number.	Twelve Months, 1st April to 31st March.			Count or Number.	Twelve Months, 1st April to 31st March.		
	1902-1903.	1903-04.	1904-05.		1902-1903.	1903-04.	1904-05.
	PANJAB.				**CENTRAL PROVINCES and BERAR.***		
1	....	....	....	1	....	....	....
2	....	....	....	2	799	....	....
3	....	....	....	3	....	....	....
4	....	....	975	4	109,589	49,850	11,162
5	....	....	....	5	....	442	....
6	....	454	53	6	880,153	908,344	638,164
7	....	....	978	7	....	18,953	641,995
8	10,135	109,381	161,817	8	1,080,699	764,013	508,965
9	....	165,502	97,611	9	82,545	394,072	665,667
10	487,399	318,568	473,681	10	4,060,310	3,309,382	3,611,982
Total Nos. 1 to 10	497,534	593,905	735,115	Total Nos. 1 to 10	6,214,095	5,445,056	5,777,935
11	2,205,950	2,950,412	2,333,177	11	174,235	217,263	637,637
12	72,546	235,520	659,231	12	4,194,607	4,851,999	4,814,976
13	4,384,262	4,932,379	3,337,843	13	330,074	291,535	722,765
14	359,006	118,102	806,113	14	1,501,782	1,710,616	1,830,230
15	737,386	975,599	1,722,262	15	193,269	118,405	282,224
16	917,286	1,181,795	1,747,180	16	2,754,099	2,881,421	2,556,160
17	137,195	313,614	478,790	17	187,410	186,432	898,437
18	....	12,099	52,787	18	778,629	1,140,807	1,043,999
19	....	8,437	2,710	19	136,721	.. .	63,823
20	194,302	220,797	154,238	20	3,122,061	3,035,132	3,488,473
Total Nos. 11 to 20	9,007,913	10,948,754	10,794,331	Total Nos. 11 to 20	13,372,887	14,433,610	15,838,724
21	17,963	820	....	21	834,932	927,280	968,181
22	16,947	15,535	4,617	22	2,155,809	2,202,601	1,924,339
23	....	....	5,215	23	320	108	....
24	33,842	....	2,714	24	535,134	381,595	476,424
25	....	....	7,605	25	....	....	....
26	1,002	....	4,704	26	58,810	40,633	76,520
27	....	....	....	27	....	....	1,244
28	....	....	....	28	2,975	469	13,540
29	....	....	....	29	....	....	831
30	2,146	10,084	24,698	30	162,674	173,136	239,006
Total Nos. 21 to 30	71,900	26,439	49,553	Total Nos. 21 to 30	3,750,654	3,725,822	3,703,085
31	..	....	....	31	....	....	....
32	....	9,248	21,280	32	748,415	691,786	676,728
33	....	....	8,364	33	....	37	4,119
34	....	....	....	34	....	538	902
35	....	....	....	35	....	....	....
36 to 39	....	....	....	36	....	....	....
40	9,678	....	15,874	37	....	411	704
				38	14,597	12,474	13,371
Total Nos. 31 to 40	9,678	9,248	45,518	39	....	....	....
				40	133,270	169,492	173,481
Above 40	....	....	....	Total Nos. 31 to 40	896,282	874,738	869,305
				Above 40	73,066	69,382	64,765
Total ..	9,587,025	11,578,346	11,624,517	Total ..	24,306,984	24,548,608	26,253,834

* The figures for Berar are included from the 1st October 1903, those for earlier periods being shown in Table No. 4.

No. 3.—DETAILED STATEMENT of the QUANTITY (in pounds) and the COUNTS (or numbers) of YARN Spun—concluded.

TOTAL OF BRITISH INDIA.

Count or Number.	Twelve months, 1st April to 31st March.		
	1902-03.	1903-04.	1904-05?
1	33,872	26,958	17,920
2	432,055	387,558	306,449
3	6,836	217,426	332,039
4	1,530,076	1,946,521	1,787,059
5	5,556	7,620	86,394
6	14,466,602	12,602,596	11,642,615
7	2,514,058	3,408,589	4,236,846
8	6,134,073	5,544,826	4,896,606
9	2,593,350	3,597,426	3,334,623
10	124,224,878	119,606,246	130,754,517
TOTAL Nos. 1 to 10	151,941,356	147,345,766	157,395,068
11	20,899,026	23,809,030	21,798,364
12	42,765,954	55,941,097	45,104,350
13	15,257,166	14,984,016	12,158,613
14	10,693,692	15,748,484	13,317,741
15	6,501,927	5,714,620	6,882,352
16	39,020,355	38,119,009	29,870,222
17	10,181,965	12,468,751	11,508,473
18	14,897,374	10,230,296	12,244,324
19	4,203,712	5,214,475	5,662,319
20	146,669,854	126,429,485	129,670,131
TOTAL Nos. 11 to 20	311,091,025	308,659,263	288,216,889
21	18,361,843	17,990,259	14,686,383
22	21,372,717	19,815,100	25,469,414
23	2,203,661	1,596,709	1,780,620
24	17,600,716	16,461,145	19,421,354
25	993,735	3,335,133	3,105,412
26	7,588,382	7,345,504	9,602,659
27	244,687	131,395	1,283,707
28	5,053,808	4,252,156	3,955,659
29	1,212	66,932	104,565
30	9,297,689	11,952,873	12,691,174
TOTAL Nos. 21 to 30	82,718,450	82,947,306	92,1[illegible]0,947
31	219,925	248,557	501,631
32	4,205,661	4,780,786	3,937,277
33	1,366,065	1,575,253	1,535,195
34	2,136,734	3,111,188	2,044,567
35	295,492	491,764	1,684,506
36	853,990	948,062	2,[illegible]17,922
37	.....	18,011	212,659
38	49,192	23,024	36,991
39	54,294	29,297	1,586
40	3,207,361	5,071,355	4,185,580
TOTAL Nos. 31 to 40	12,386,714	16,297,297	16,957,914
Above 40	674,495	941,260	1,277,608
TOTAL	558,812,040	556,190,792	555,948,426

No. 4.—DETAILED STATEMENT of the QUANTITY (in pounds) and the COUNTS (or numbers) of YARN Spun.

BERAR,* NATIVE STATES and FOREIGN TERRITORY.

Count or Number.	Twelve months, 1st April to 31st March.		
	1902-03.	1903-04.	1904-05.
1	.....	.....	.....
2	.....	.....	.....
3	46,326	107,882	126,133
4	6,133	35,909	72,222
5	.....	700	.....
6	640,641	748,107	779,585
7	468,391	541,014	653,977
8	412,572	393,339	632,157
9	306,124	338,657	366,065
10	1,645,305	1,875,724	1,559,227
TOTAL Nos. 1 to 10 ...	3,525,492	4,041,332	4,189,366
11	767,048	1,243,275	1,033,952
12	982,336	1,245,789	953,080
13	306,639	766,194	896,589
14	769,396	788,182	988,854
15	81,552	148,927	703,546
16	1,244,926	1,450,037	945,028
17	323,119	421,282	735,242
18	1,067,460	1,610,359	1,506,595
19	465,108	276,846	217,112
20	3,994,104	6,511,382	6,245,994
TOTAL Nos. 11 to 20 ...	10,001,688	14,462,273	14,219,992
21	1,391,173	1,549,434	1,173,291
22	682,001	1,161,721	1,388,863
23	212,085	282,180	127,312
24	229,101	153,566	242,089
25	.....	2,810	28,790
26	232,830	213,894	278,198
27	.....	.....	18,438
28	296,686	319,893	163,369
29	.....	.....	.....
30	184,818	159,634	410,954
TOTAL Nos. 21 to 30 ...	3,228,894	3,843,132	3,831,204
31	.....	.....	.....
32	94,834	129,066	27,074
33	16,160	24,623	8,250
34	13,478	66,802	156,028
35	.....	.....	.....
36	37	.....	.....
37 to 39	.....	.....	.....
40	1,637	.....	630
TOTAL Nos. 31 to 40 ...	126,146	220,491	191,982
Above 40 ...	.....	1,055	305
TOTAL ...	16,882,220	22,568,283	22,432,849

* Berar figures have been included in those for the Central Provinces with effect from the 1st October 1903.

No. 5.—DETAILED STATEMENT of the QUANTITY (in pounds and their equivalent in yards) and DESCRIPTION of WOVEN GOODS produced.

BOMBAY PRESIDENCY.

Description of Goods.		Twelve Months, 1st April to 31st March.		
		1902-03.	1903-04.	1904-05.
Grey Goods—				
Chadars	pounds	12,661,595	12,746,221	12,966,283
	yards	35,344,133	36,284,695	36,728,357
Dhutis	pounds	19,654,284	22,402,323	24,113,881
	yards	89,290,616	99,884,483	109,711,002
Drills and jeans	pounds	518,772	787,606	1,410,007
	yards	1,866,762	2,629,173	4,768,292
Jaconets	pounds	78,476	53,867	22,934
	yards	503,934	391,956	145,450
Madapollams	pounds	13,028	36,763	96,079
	yards	102,758	336,120	844,307
Mulls	pounds	17,159	2,450	19,836
	yards	122,592	17,706	135,257
Printers	pounds	1,678,299	2,984,697	5,309,090
	yards	7,848,321	14,065,171	25,526,092
Shirtings and longcloths	pounds	29,900,036	35,139,761	42,656,089
	yards	126,638,313	147,101,738	185,947,593
T.-Cloths, domestics and sheetings	pounds	14,166,284	14,128,573	15,510,576
	yards	66,876,562	67,962,301	76,658,129
Other kinds...	pounds	5,043,736	4,527,582	6,278,471
	yards	17,882,070	17,313,171	24,943,166
TOTAL ...	pounds	83,731,669	92,809,843	108,383,246
	yards	346,476,061	385,986,514	465,407,645
Figured and Coloured Goods	pounds	16,208,562	19,154,041	21,637,622
Hosiery	"	466,148	635,511	571,367
	dozens (*a*)	39,734	38,998	37,400
Miscellaneous Goods	pounds	59,239	117,715	406,057
TOTAL BOMBAY ...	"	100,465,618	113,717,110	130,998,292

BOMBAY ISLAND.

Description of Goods.		Twelve Months, 1st April to 31st March.		
		1902-03.	1903-04.	1904-05.
Grey Goods—				
Chadars	pounds	9,622,902	9,884,912	10,116,529
	yards	26,225,242	27,356,276	27,700,343
Dhutis	pounds	4,117,787	4,364,930	6,329,266
	yards	18,845,317	19,356,290	27,748,518
Drills and jeans	pounds	510,374	772,135	1,373,705
	yards	1,841,410	2,582,407	4,644,263
Jaconets	pounds	36,183	17,889	18,165
	yards	196,328	107,358	112,147
Madapollams	pounds	10,285	36,763	96,079
	yards	87,742	336,120	844,307
Mulls	pounds	12,500	929	14,478
	yards	91,200	6,478	98,736
Printers	pounds	127,326	206,429	443,998
	yards	549,856	901,378	2,048,330
Shirtings and longcloths	pounds	22,596,923	25,444,742	33,834,436
	yards	99,077,810	111,440,758	152,710,773
T-cloths, domestics and sheetings ...	pounds	12,282,644	12,360,332	13,936,806
	yards	56,889,130	57,756,962	67,361,161
Other kinds	pounds	3,408,479	3,368,341	5,261,658
	yards	12,164,588	13,238,561	21,299,568
TOTAL	pounds	52,720,403	56,457,402	71,425,120
	yards	215,968,623	233,082,588	304,568,146
Figured and Coloured Goods... ...	pounds	15,984,518	18,549,983	20,529,150
Hosiery	"	466,148	635,511	571,367
	dozens (*a*)	39,734	38,998	37,400
Miscellaneous Goods	pounds	(*b*)	113,875	393,707
TOTAL BOMBAY ISLAND...	"	69,171,069	75,756,771	92,919,344

Note.—The suburb of Coorla in the Thana District is treated for statistical purposes as part of the Island of Bombay.

(*a*) The production of these articles is not reported by weight.

(*b*) Included in figured and coloured goods.

No. 5.—*DETAILED STATEMENT of the QUANTITY (in pounds and their equivalent in yards) and DESCRIPTION of WOVEN GOODS produced*—continued.

AHMEDABAD.

Description of Goods.		Twelve Months, 1st April to 31st March.		
		1902-03.	1903-04.	1904-05.
Grey Goods—				
Chadars	pounds	2,727,982	2,606,437	2,536,941
	yards	8,295,576	8,271,228	8,193,556
Dhutis	pounds	13,864,467	16,623,522	16,951,479
	yards	63,196,282	74,750,609	78,710,662
Drills and jeans	pounds	7,895	13,896	20,135
	yards	23,831	41,628	70,726
Jaconets	pounds	42,267	35,970	4,684
	yards	307,466	284,558	32,843
Madapollams	pounds	5	.....	.....
	yards	40	.....	.....
Mulls	pounds	4,647	1,522	5,354
	yards	31,334	11,228	36,474
Printers	pounds	950,327	1,997,409	3,301,725
	yards	4,377,312	9,982,667	16,828,507
Shirtings and longcloths	pounds	3,168,698	5,099,282	4,101,212
	yards	15,375,184	20,789,847	17,840,182
T-cloths, domestics and sheetings ...	pounds	966,333	1,020,725	819,917
	yards	5,350,687	6,610,377	5,633,918
Other kinds	pounds	1,338,049	752,445	591,366
	yards	1,968,245	2,626,226	2,182,061
TOTAL	pounds	23,070,670	28,151,208	28,332,813
	yards	98,925,957	123,368,368	129,528,929
Figured and Coloured Goods	pounds	237,721	521,978	974,441
Hosiery	„	.....	.....	.....
Miscellaneous Goods	„	(*a*)	3,142	12,119
TOTAL AHMEDABAD ...	„	23,308,391	28,676,328	29,319,373

MADRAS.

Description of Goods.		Twelve Months, 1st April to 31st March.		
		1902-03.	1903-04.	1904-05.
Grey Goods—				
Chadars	pounds	2,690	678	319
	yards	10,540	1,325	790
Dhutis	pounds	234,610	224,609	206,330
	yards	840,843	772,473	755,186
Drills and jeans	pounds	321,206	494,605	968,233
	yards	891,913	1,459,410	2,820,405
Jaconets	pounds	.....	.....	.....
	yards	.....	.....	.....
Madapollams	pounds	.....	.....	.....
	yards	.....	.....	.....
Mulls	pounds	.....	.....	.....
	yards	.....	.....	.....
Printers	pounds	.....	.....	.....
	yards	.....	.....	.....
Shirtings and longcloths	pounds	103,408	111 960	78,140
	yards	347,452	416.652	293,038
T-Cloths, domestics and sheetings	pounds	1,056,585	792,594	1,646,905
	yards	3,601,101	2,647,677	5,600,834
Other kinds	pounds	524,457	529,473	452,207
	yards	1,564,507	1,495,662	1,471,895
TOTAL ...	pounds	2,242,956	2,153,919	3,352,134
	yards	7,056,356	6,793,199	10,942,148
Figured and Coloured Goods...	pounds	2,725,020	3,151,631	3,192,502
Hosiery	„	.....	.....	.....
Miscellaneous Goods	„	27,093	38,026	34,211
TOTAL MADRAS ...	„	4,995,069	5,343,576	6,578,847

(*a*) Included in figured and coloured goods.

No. 5.—DETAILED STATEMENT of the QUANTITY (in pounds and their equivalent in yards) and DESCRIPTION of WOVEN GOODS produced—continued.

BENGAL.

Description of Goods.		Twelve Months, 1st April to 31st March		
		1902-03.	1903-04.	1904-05.
Grey Goods—				
Chadars	pounds	83,475	136,199	121,588
	yards	346,092	427,822	373,634
Dhutis	pounds	71,657	181,288	201,139
	yards	328,580	783,394	979,753
Drills and jeans	pounds	60	3,070	17,748
	yards	216	8,946	72,076
Jaconets	pounds	.....	.....	.....
	yards	.....	.....	.....
Madapollams	pounds	.....	.....	.....
	yards	.....	.....	.....
Mulls	pounds	.....	.....	.....
	yards	.....	.....	.....
Printers	pounds	56	.....	.....
	yards	204	.....	.....
Shirtings and longcloths	pounds	65,734	86,205	90,261
	yards	203,880	323,756	394,287
T-Cloths, domestics and sheetings	pounds	76,704	131,366	119,860
	yards	371,641	828,620	780,054
Other kinds	pounds	18,397	35,518	2,020
	yards	90,601	190,021	9,016
TOTAL	pounds	316,583	572,646	552,616
	yards	1,341,214	2,562,559	2,608,820
Figured and coloured goods	pounds	7,384	14,426	35,410
Hosiery	„	.....	.....	.....
Miscellaneous goods	„	90,889	102,743	132,198
TOTAL	„	414,856	690,815	720,224

UNITED PROVINCES of AGRA and OUDH (also AJMER-MERWARA).

Description of Goods.		Twelve Months, 1st April to 31st March		
		1902-03.	1903-04.	1904-05.
Grey Goods—				
Chadars	pounds	9,201	87,443	210,419
	yards	28,367	197,599	504,821
Dhutis	pounds	1,402,862	1,466,073	1,751,150
	yards	5,812,524	6,154,537	7,377,861
Drills and jeans	pounds	248,237	344,515	316,296
	yards	667,151	918,084	833,163
Jaconets	pounds	.....	.....	.....
	yards	.....	.....	.....
Madapollams	pounds	.....	.....	.....
	yards	.....	.....	.....
Mulls	pounds	.....	1,057	2,419
	yards	.....	6,745	16,104
Printers	pounds	180,855	123,734	219,085
	yards	691,094	479,175	890,255
Shirtings and longcloths	pounds	1,136,481	1,122,536	1,087,195
	yards	4,270,200	4,455,674	4,528,300
T- Cloths, domestics and sheetings	pounds	688,004	1,511,344	1,434,523
	yards	2,066,786	5,003,556	5,147,980
Other kinds	pounds	759,486	663,878	984,181
	yards	2,625,320	2,450,755	3,331,709
TOTAL	pounds	4,425,126	5,320,579	5,955,268
	yards	16,161,442	19,666,625	22,630,193
Figured and coloured goods	pounds	138,819	160,540	62,744
Hosiery	yards	.....	.....	.....
Miscellaneous goods	„	21,582	12,748	.....
TOTAL	pounds	4,585,527	5,493,867	6,018 012

No. 5.—DETAILED STATEMENT of the QUANTITY (in pounds and their equivalent in yards) and DESCRIPTION of WOVEN GOODS produced—continued.

PANJAB.

DESCRIPTION.		TWELVE MONTHS, 1ST APRIL to 31ST MARCH		
		1902-03.	1903-04.	1904-05.
Grey Goods—				
Chadars	pounds	8,195	1,102	.....
	yards	25,976	2,552	.....
Dhutis	pounds	50,115	26,824	92,048
	yards	147,522	80,986	274,906
Drills and jeans	pounds	352	975	433
	yards	1,000	2,748	1,291
Jaconets	pounds	.....	.....	.....
	yards	.....	.....	.....
Madapollams	pounds	.....	.....	.....
	yards	.....	.....	.....
Mulls	pounds	.....	145	.....
	yards	.....	1,105	.....
Printers	pounds	.....	.....	.....
	yards	.....	.....	.....
Shirtings and longcloths	pounds	.....	.....	.....
	yards	.....	.....	.....
T.-Cloths, domestics and sheetings	pounds	74,395	25,197	41,316
	yards	232,232	78,091	128,655
Other kinds	pounds	44,463	10,684	15,976
	yards	129,886	23,776	42,443
TOTAL	pounds	177,510	64,927	149,773
	yards	536,416	189,258	447,295
Figured and coloured goods	pounds	.....	.....	.....
Hosiery	„	.....	.....	.....
Miscellaneous goods	„	.....	.....	.....
TOTAL PANJAB	„	177,510	64,927	149,773

CENTRAL PROVINCES AND BERAR (*a*).

DESCRIPTION.		TWELVE MONTHS, 1ST APRIL to 31ST MARCH		
		1902-03.	1903-04.	1904-05.
Grey Goods—				
Chadars	pounds	810,462	741,435	697,277
	yards	2,309,843	2,016,630	1,875,571
Dhutis	pounds	736,781	1,239,428	1,432,804
	yards	3,363,863	5,461,587	6,198,227
Drills and jeans	pounds	120,354	174,157	263,856
	yards	373,870	507,391	754,568
Jaconets	pounds	.....	.....	.....
	yards	.....	.....	.....
Madapollams	pounds	.....	.....	.....
	yards	.....	.....	.....
Mulls	pounds	1,501	2,208	505
	yards	14,508	22,754	5370
Printers	pounds	152,091	241,606	464,141
	yards	643,630	1,054,278	2,091,794
Shirtings and longcloths	pounds	1,239,459	1,572,786	1,595,528
	yards	5,009,147	6,313,267	6,401,009
T-Cloths, domestics and sheetings	pounds	705,980	881,732	793,317
	yards	4,146,283	5,246,932	4,419,781
Other kinds	pounds	985,000	738,859	725,418
	yards	2,986,140	2,066,789	2,328,866
TOTAL	pounds	4,751,628	5,592,211	5,970,146
	yards	13,847,284	22,689,628	24,075,186
Figured and coloured goods	pounds	764,982	722,432	576,391
Hosiery	„	.....	.....	.....
Miscellaneous goods	„	1,129,442	1,251,289	1,730,145
TOTAL CENTRAL PROVINCES	„	6,646,052	7,565,932	8,276,682

(*a*) The figures for Berar are included from the 1st October 1903, those for earlier periods being shown in table No. 6.

No. 5.—DETAILED STATEMENT of the QUANTITY (in pounds and their equivalent in yards) and DESCRIPTION of WOVEN GOODS produced—concluded.

TOTAL OF BRITISH INDIA.

DESCRIPTION.		TWELVE MONTHS, 1ST APRIL to 31ST MARCH		
		1902-03.	1903-04.	1904-05.
Grey Goods—				
Chadars	pounds ...	13,575,618	13,713,078	13,995,886
	yards ...	38,064,951	38,930,622	39,483,173
Dhutis	pounds ...	22,150,309	25,540,544	27,796,852
	yards ...	99,783,748	113,137,460	125,296,935
Drills and jeans	pounds ...	1,208,981	1,804,928	2,976,573
	yards ...	3,800,912	5,526,252	9,249,795
Jaconets	pounds ...	78,476	53,867	22,934
	yards ...	503,934	391,956	145,450
Madapollams	pounds ...	13,028	36,763	96,079
	yards ...	102,758	336,120	844,307
Mulls	pounds ...	18,660	5,860	22,760
	yards ...	137,100	48,310	156,731
Printers	pounds ...	2,011,301	3,350,037	5,992,316
	yards ...	9,183,249	15,598,624	28,508,141
Shirtings and longcloths	pounds ...	32,445,118	38,033,248	45,455,013
	yards ...	136,468,992	158,611,087	197,564,227
T. cloths, domestics and sheetings.	pounds ...	16,767,952	17,470,806	19,546,497
	yards ...	77,294,605	81,767,177	92,735,433
Other kinds	pounds ...	7,376,029	6,505,994	8,458,273
	yards ...	25,078,524	23,540,174	32,127,095
TOTAL	pounds ...	95,645,472	106,515,125	124,363,183
	yards ...	390,418,773	437,887,783	526,111,287
Figured and Coloured Goods ...	pounds ...	19,845,130	23,203,070	25,504,669
Hosiery	„ ...	466,148	635,511	571,367
	dozens ...	39,734	38,998	37,400
Miscellaneous goods	pounds ...	1,327,882	1,522,521	2,302,611
TOTAL	pounds ...	117,284,632	131,876,227	152,741,830

No. 6.—DETAILED STATEMENT of the QUANTITY (in pounds and their equivalent in yards) and DESCRIPTION of WOVEN GOODS produced.

BERAR (a), NATIVE STATES and FOREIGN TERRITORY.

Description.		Twelve Months, 1st April to 31st March		
		1902-03.	1903-04.	1904-05.
Grey Goods—				
Chadars	pounds ...	273,576	348,116	260,154
	yards ...	820,366	1,009,793	783,308
Dhutis	pounds ...	1,113,359	1,158,256	1,297,664
	yards ...	4,765,619	4,815,494	5,230,114
Drills and jeans	pounds ...	86,313	47,782	5,412
	yards ...	251,172	135,359	17,294
Jaconets	pounds ...	.....	.....	.....
	yards ...	.....	.....	.....
Madapollams	pounds ...	.....	.....	.....
	yards ...	.....	.....	.....
Mulls	pounds ...	.....	.....	.....
	yards ...	.....	.....	.....
Printers	pounds ...	384,546	691,323	517,323
	yards ...	1,616,898	3,035,514	2,261,619
Shirtings and longcloths	pounds ...	1,419,211	1,152,560	1,032,078
	yards ...	7,487,546	4,687,658	4,147,180
T. cloths, domestics and sheetings ...	pounds ...	986,781	1,592,729	1,457,668
	yards ...	4,623,195	5,996,620	5,550,088
Other kinds	pounds ...	725,963	841,895	1,123,942
	yards ...	2,491,896	2,976,052	3,612,091
Total ...	pounds ...	4,989,749	5,832,661	5,694,241
	yards ...	22,056,692	22,656,490	21,601,694
Figured and Coloured Goods	pounds ...	101,066	73,221	27,008
Hosiery	„ ...	147,284	178,820	188,035
Miscellaneous goods	„ ...	53,178	83,243	95,441
Total	„ ...	5,291,277	6,167,945	6,004,725

(a) Berar figures have been included in those for the Central Provinces with effect from the 1st October 1903.

No. 7.—STATEMENT of the AMOUNT (in Rupees) of EXCISE DUTY assessed on goods woven in the Cotton Mills in India, under the Cotton Duties Act, II of 1896.

	1900-01.	1901-02.	1902-03.	1903-04.	1904-05.
British India.					
Bombay	10,28,542	15,26,103	15,84,121	17,64,527	20,43,832
Madras	41,827	54,139	67,813	62,350	65,379
Bengal	5,038	5,863	6,605	10,908	11,930
United Provinces of Agra and Oudh (also Ajmer Merwara)	50,116	69,284	74,023	89,189	96,710
Panjab...	5,806	4,379	3,031	1,104	2,607
Central Provinces	84,978	1,10,140	1,21,664	1,32,387	1,43,492
Berar (*a*)	.....	.....	8,956	16,984	17,877
TOTAL, GROSS DUTY	12,16,307	17,69,908	18,66,213	20,77,449	23,81,827
„ NET DUTY	11,62,947	17,16,836	18,25,469	20,36,104	23,32,876
Foreign Territory.					
Berar (*a*) and the Native States of Indore, Mysore, Baroda, Nandgaon and Bhavnagar—					
GROSS DUTY	48,449	61,171	65,541	59,061	67,320
NET DUTY		61,129		59,045	
GRAND TOTAL, GROSS DUTY	12,64,756	18,31,079	19,31,754	21,36,510	24,49,147
„ NET DUTY	12,11,396	17,77,965	18,91,010	20,95,149	23,99,696

(*a*) Collections in Berar have been entered under British India from the 1st October 1902, from which date the province was leased in perpetuity to the British Government.

BOMBAY
MILLOWNERS' ASSOCIATION.

COTTON SPINNING AND WEAVING MILLS WORKING
AND
IN COURSE OF ERECTION IN INDIA
ON
30 JUNE 1904.

C. J. MICHAEL,
Assistant Secretary.

00133715

Digitized with financial assistance from
Government of Maharashtra
on 13 March, 2020